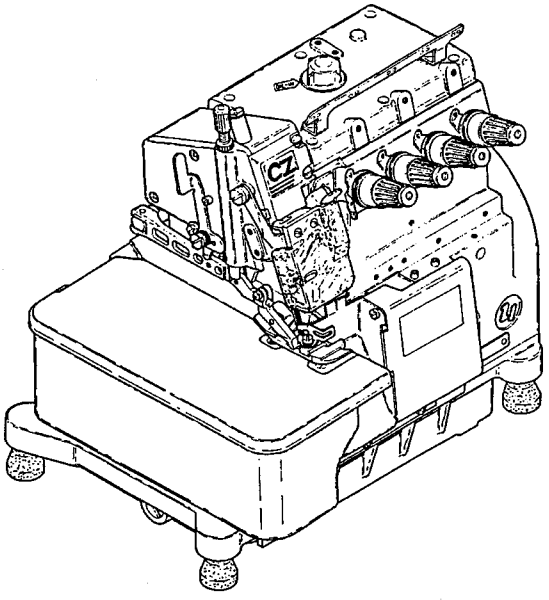
INSTRUCTIONS

CZ6000
CZ6500

HIGH SPEED
OVERLOCK & SAFETY STITCH MACHINE



SAVE ALL INSTRUCTION MANUALS.
READ AND UNDERSTAND THOROUGHLY FOR SAFETY OPERATION.

YAMATO SEWING MACHINE MFG. CO.,LTD.

Contents

This instruction manual is made mainly for technichians, however, the marks are attached to the section titles which operator should read so as to operate the machines properly.

Contents

Contents

Safety Instructions

1. To ensure safe use

Always observe the following instructions to ensure the safe use of the industrial sewing machines and devices.

1-1 Application and purpose

The sewing machine is designed to improve productivity in the sewing industry and must not be used for other applications and purposes. Do not use this sewing machine until it can be confirmed that safety measures for the drive units have been taken.

1-2 Before use

Read all instruction manuals thoroughly before starting the use of this machine and follow them. Also, read the instruction manual for the installed drive unit.

1-3 Working environment

DO NOT WORK IN THE FOLLOWING ENVIRONMENTS:

- Place where atmosphere temperature and humidity give a bad influence the performance of sewing machines.
- Outdoors and place where the sewing machines are exposed to sunlight directly.
- Atmosphere containing dust, corrosive gases or flammable gases.
- Place where voltage fluctuation exceeds ± 10 % of the rated voltage.
- Place where power capacity necessary for the used motor specifications can not be secured.
- Place where strong electric or magnetic fields are generated such as near large-output high frequency transmitters or high frequency welding machines.

1-4 Unpacking and transportation

(1) Unpack from the top.

(2) Never hold the parts near the needle or threading parts when removing the sewing machine head from the buffer of box.

(3) When carrying the sewing machine head, have an assistant.

(4) Pay attention not to get excessive impact or shock when moving the sewing machine head with a pushcart.

2. Installation and preparation

2-1 Instruction and training

Operators and workers who supervise, repair or maintain the machine head and machine unit are required to have the adequate knowledge and operation skills to do the job safely. In order to establish such necessary conditions, it needs for the employer to plan and enforce the safety education and training to those workers.

2-2 Sewing table and motor

(1) Prepare a machine table that has enough strength to withstand the weight of the sewing head and any reaction while operating.

(2) Maintain a comfortable working environment with considering the lighting and the arrangement of sewing machine so that the operators can work smoothly.

(3) When installing the control box and the related parts on the sewing machine, take care about the posture of the worker.

(4) Install the drive unit correctly according to the instruction manual.

2–3 Wiring

(1) Never connect the plug for power supply until assembly is finished.

(2) Fix the connectors securely to the sewing machine head, motor, and electric apparatus.

(3) Do not apply excessive force to the connection cords.

(4) Connect the cords away from the driving parts.

(5) Place the ground wire securely to the designated position on the machine head.

2–4 Before operation

(1) Take care not to attach lubricant, silicone oil, and grease on the eyes or skin. Keep them away from children.

(2) Be sure to fill or drop lubrication oil before operating the sewing machine. Use the Yamato SF oil as specified.

(3) Never put your hand under the needle or near the moving parts of the machine when turning on power supply switch.

(4) When operating a new sewing machine, make sure the rotating direction of pulley agrees with the rotating–direction mark.

2–5 During operation

(1) Be sure to operate the sewing machine with the safeguards such as belt cover, finger guard, eye guard.

(2) Never place the finger, hair or objects under the needle or close to the moving parts while operating the sewing machine.

(3) Be sure to turn off the power supply switch when threading or replacing the needles.

(4) Never place your hands close to the knives when operating the sewing machine with the trimming devices.

(5) Be sure to turn off the power supply switch when terminating the sewing work or leaving the sewing machine.

(6) If the sewing machine malfunctions, abnormal sound or smell something unusual while operating, be sure to turn off the power supply switch.

2–6 Removal

(1) Turn off the power supply switch if removed or replaced any parts or during adjustment of sewing machine.

(2) Do not pull the cord when removing the plug. Be sure to hold the plug itself.

(3) A high voltage is applied inside the control box. Turn off the power supply switch and wait more than 5 minutes before opening the cover.

3. Maintenance, inspection, and repair

(1) Follow the instruction manuals for maintenance, inspection, and repair.

(2) Entrust the maintenance, inspection, and repair to specially trained personnel.

(3) Be sure to turn off the power supply switch and make sure the sewing machine and motor completely stop before the maintenance, inspection, and repair. (If using a clutch motor, take care that the motor keeps turning for a while even after turning off the power supply switch.)

(4) Do not modify the sewing machine by the customer's judgement.

(5) Be sure to use original replacement parts for repairs or maintenance.

4. Caution signs and alert pictorial markings

This instruction manual contains the following caution signs and alert pictorial markings to prevent you from injuring yourself or the sewing machine from being damaged. Please follow the instructions.

4-1 Meanings of caution signs

WARNING indicates a potentially hazardous situations which, if not heeded, could result in death or serious injury to you and others.

CAUTION indicates hazardous situations which, if not heeded, may result in minor or moderate injury to you and others, or may result in machine damage.

NOTE is used to emphasize essential information.

4-2 Alert pictorial markings

This mark indicates the warning which, if not heeded, could result in death or serious injury.

This mark indicates the caution for high temperature.

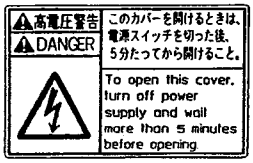
This mark indicates the caution which, if not heeded, may result in minor or moderate injury or machine damage and the note to emphasize essential information.

This mark indicates the warning of electric shock by high voltage.

This mark indicates the caution which, if not grounded, the machine or device could malfunction and could result in personal injury.

5. Warning labels on sewing machines

This label indicates that removal of the safeguards and works except for sewing performance while the power supply switch is on are prohibited. (For details, see the next page.)

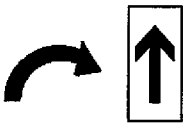


High-voltage applies in the control box. This label indicates that electric shock may be caused.

This label is affixed on the safeguards. Considering the operation, it is not affixed on the finger guard and eye guard. Be sure to operate with the finger guard and eye guard in position.

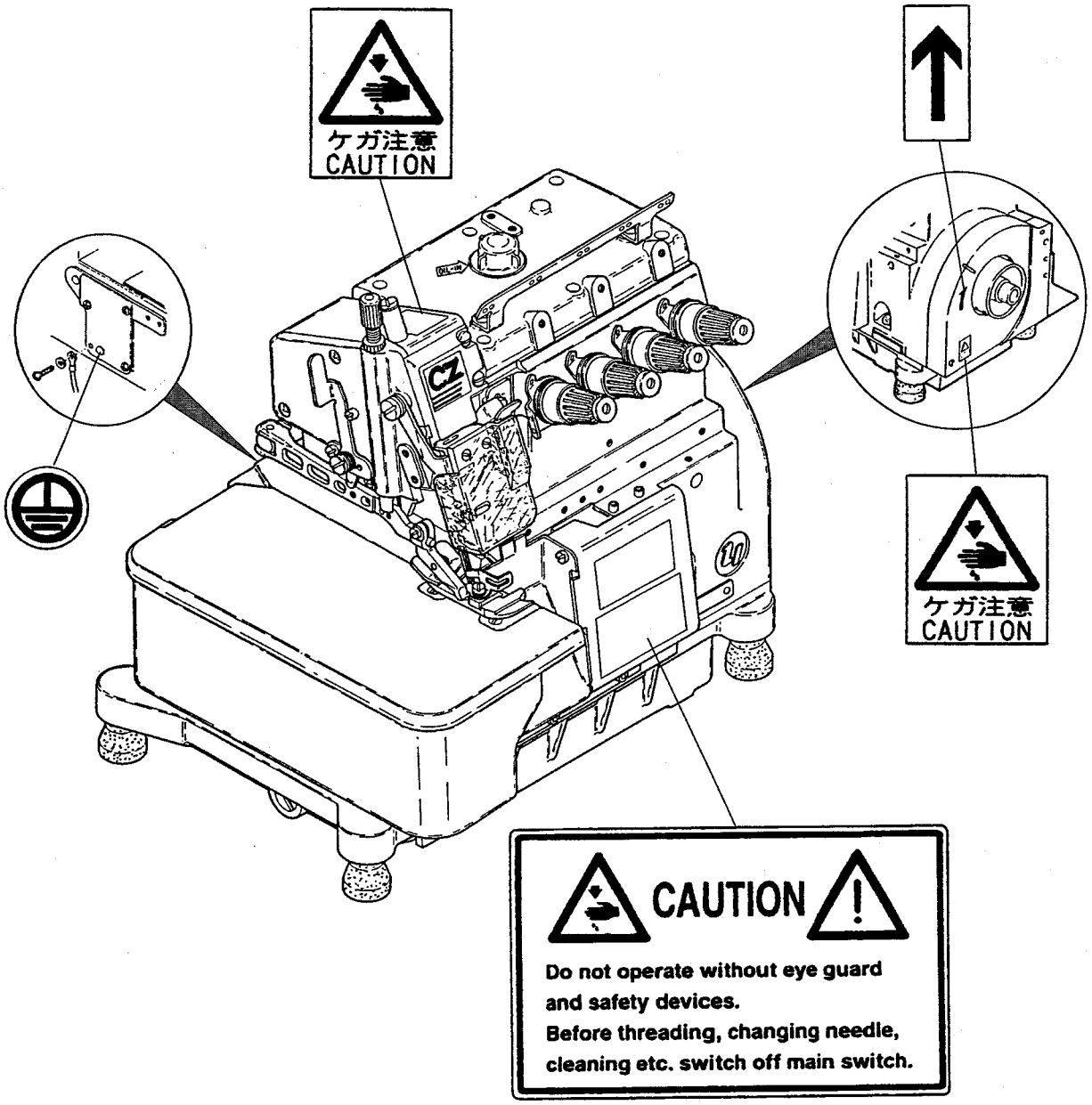
Stepping motor and solenoid may overheat if used continuously. To prevent a burn, take care not to touch.

If not connected earth line, static electricity may be generated and inflict injury on person. In addition, the malfunction of electric system may cause injury to person.

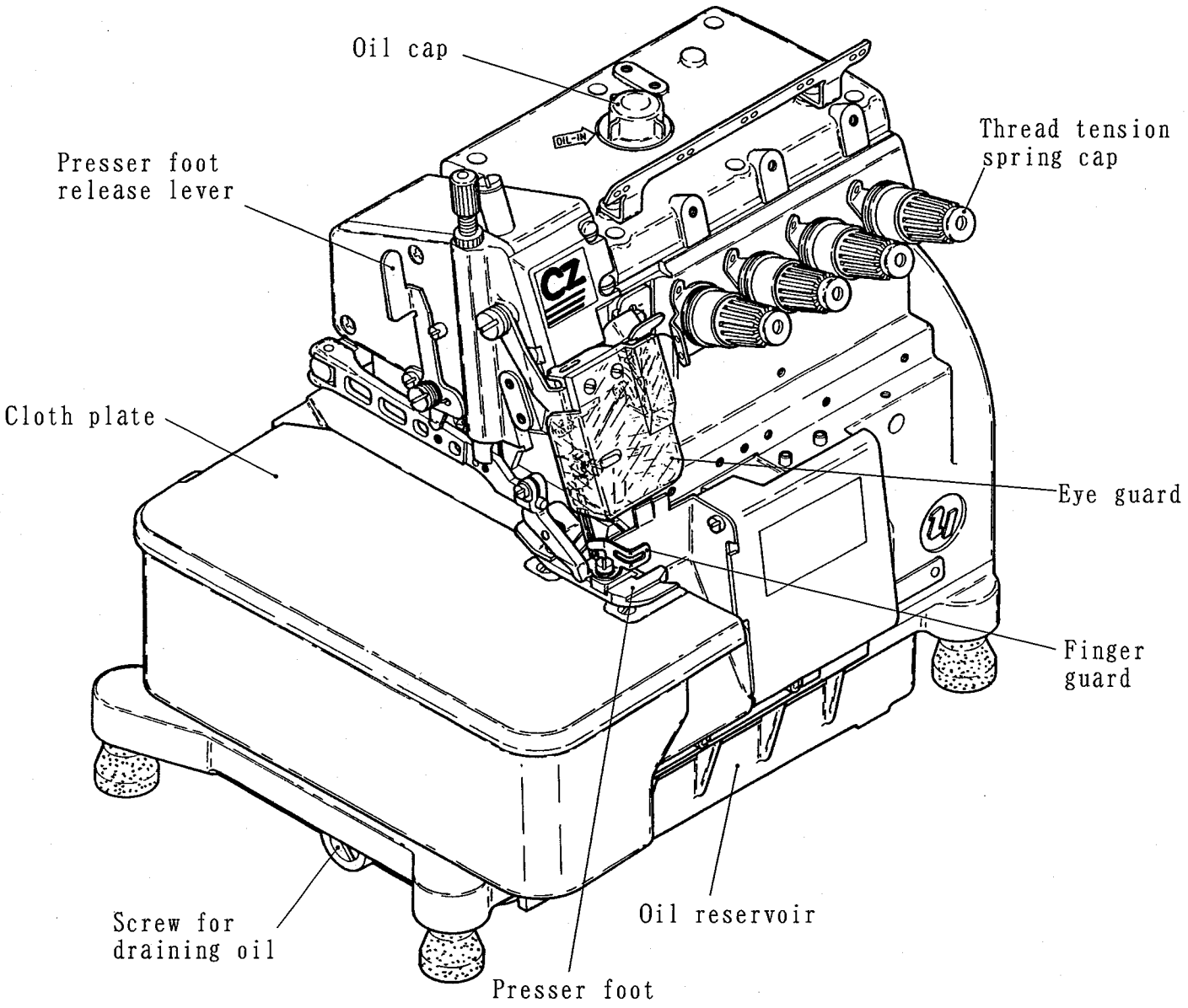


Check the rotating direction of machine pulley agrees with 'ROTATING-DIRECTION SYMBOL'.

Safety Instructions

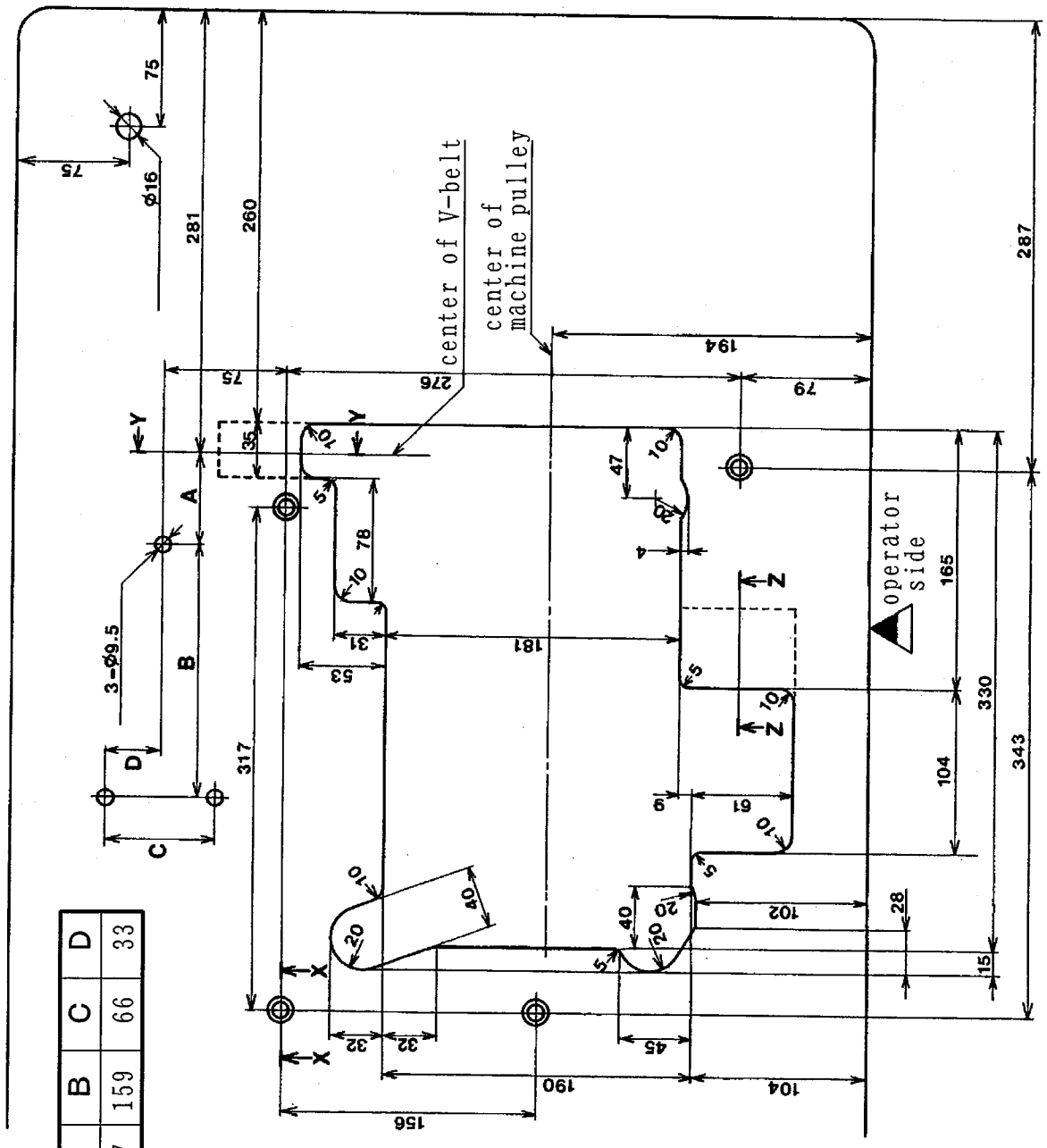


1 . Name of each part



2 . Installation

2-1 Table cutting diagram (semi-submerged type)

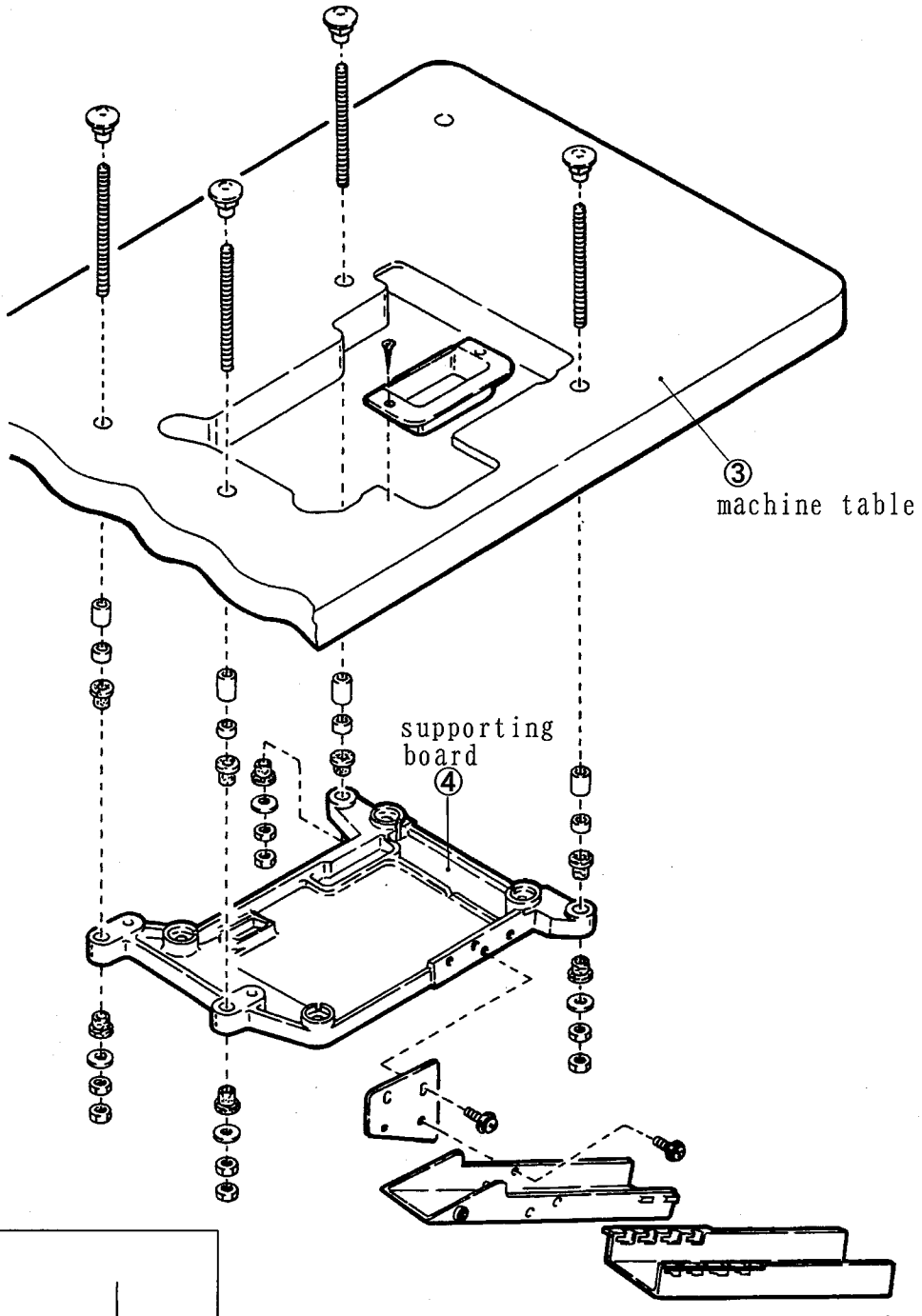


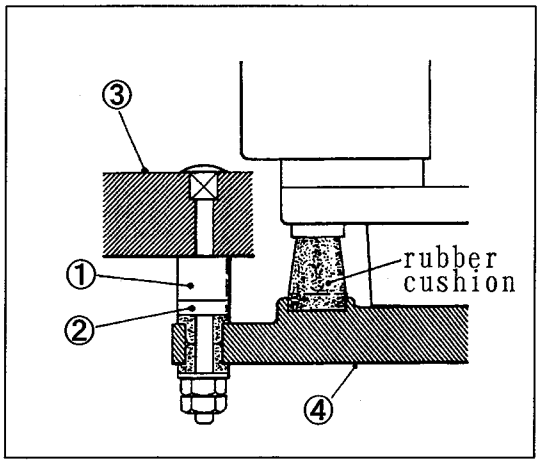
A	B	C	D
57	159	66	33

2 . Installation

2-2 Installation for semi-submerged type table

See the figure and install correctly.





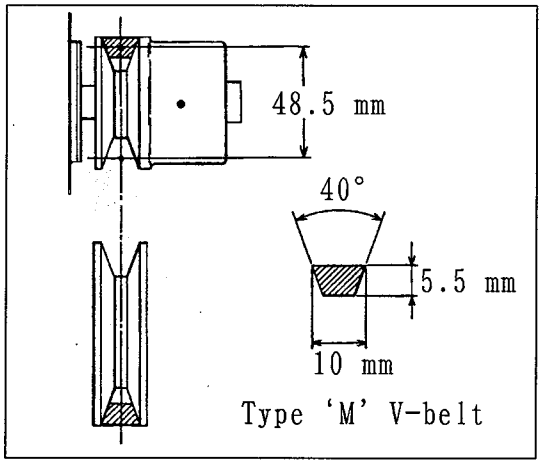
* The number of spacer① and spacer②

Thickness of table	pcs. of ①	pcs. of ②
40 mm	4	4
45 mm	4	not necessary

Size of spacer: ①=15 mm, ②=5 mm

2 . Installation

2-3 Motor and belt



See the instruction manual for the motor to be used and install the motor properly.

Install the clutch motor so that the center of the motor pulley and the machine pulley are aligned when the motor pulley shifts to left by pressing down the pedal.

outside diameter of motor pulley (mm)	s.p.m. of machine for	
	50 Hz	60 Hz
90		6000
95		6400
105	5900	
110	6200	
115	6500	

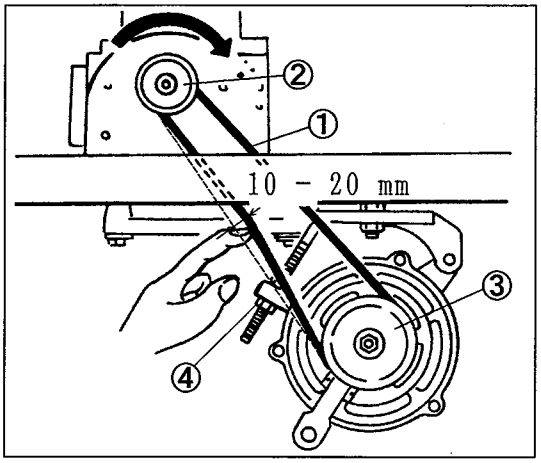
For your reference, the chart shows the out side diameters of the motor pulley and s.p.m. of the machine when using the clutch motor of 3-shape, 2-pole, 400W(1/2 HP).

A commercial pulley is provided at intervals of 5mm in outside diameter. The outside diameters on the chart are the nearest size to the calculated value.

⚠ CAUTION

If a proper motor pulley is not used, s.p.m. of the machine may exceed the maximum speed. The machine may be troubled.

2-4 Engaging belt



⚠ WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before engaging the belt.

The M-type of V-belt should be used.

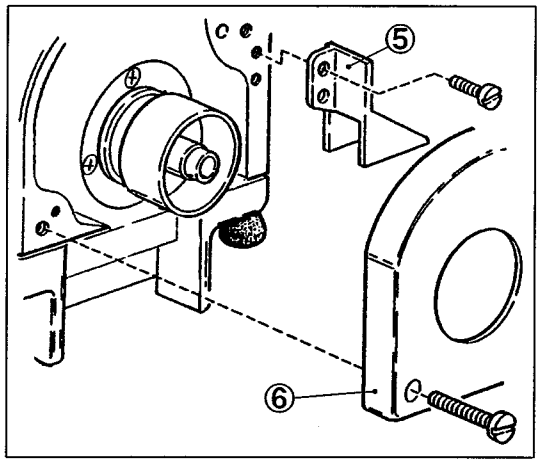
(1) Engage the belt① with the machine pulley②, and then with the motor pulley③ while turning the machine pulley② with manually.

(2) Adjust so that the tension of the belt is 10 mm - 20 mm with the nut④ when its middle is pressed with finger.

(3) After adjusting, lock with the nut④.

2 . Installation

2-5 Installing belt cover



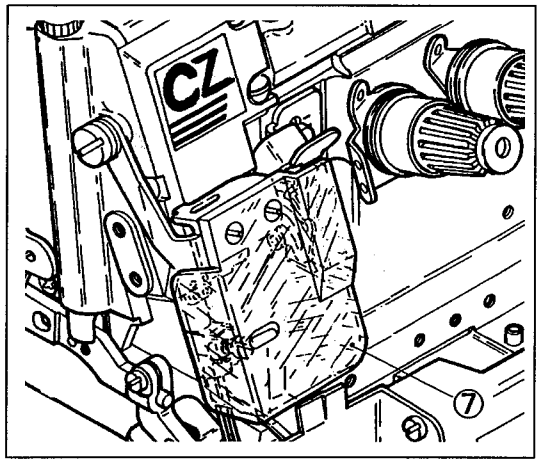
WARNING

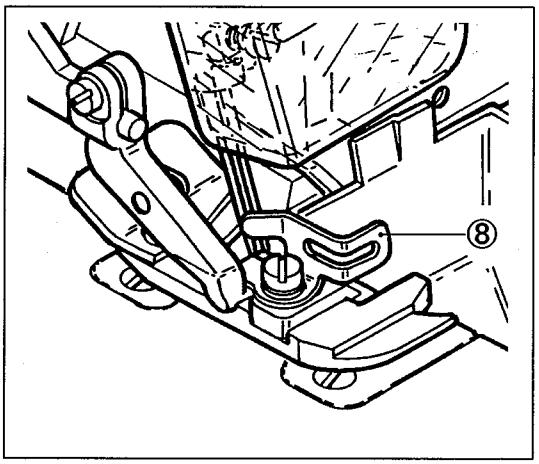
To prevent you from injuring yourself and a material from being caught by the belt, be sure to install the belt cover.

(1) Install the auxiliary belt cover⑤ as shown in the figure.
(2) Install the belt cover⑥ as shown in the figure.

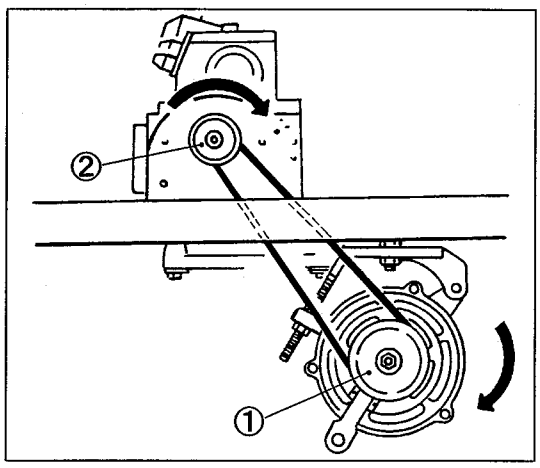
2-6 Installing eye guard and finger guard

To ensure the safe use, ALWAYS use the machine with the eye guard⑦ and the finger guard⑧.





3 . Sewing speed and rotating direction of pulley



The maximum sewing speed is shown at the table below.
To ensure long service life under good conditions, your new machine should be run with the cycle lowered 15 - 20 % of the maximum cycle during the first 200 hours (approximately one month).

The rotating direction of the motor pulley① and the machine pulley② is clockwise as shown in the figure.

⚠CAUTION

If the pulley is reversed, oil can not be supplied properly. It may cause the machine trouble.

Maximum sewing speed (s.p.m.)	
CZ6000 class	6700
CZ6500 class	6500

4 . Lubricating oil

⚠WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

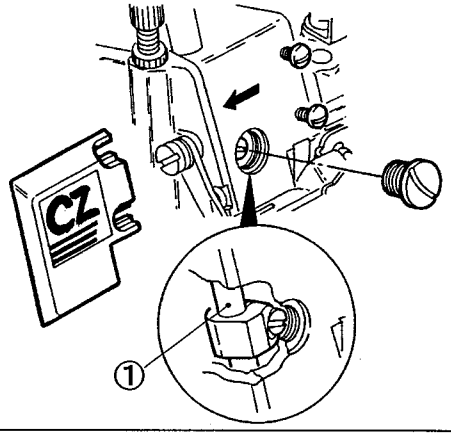
4-1 Lubricating oil to be used

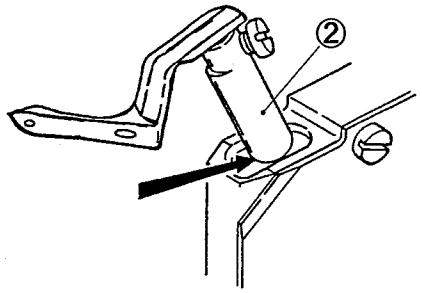
The Yamato SF oil No.28 should be used as lubricating oil.

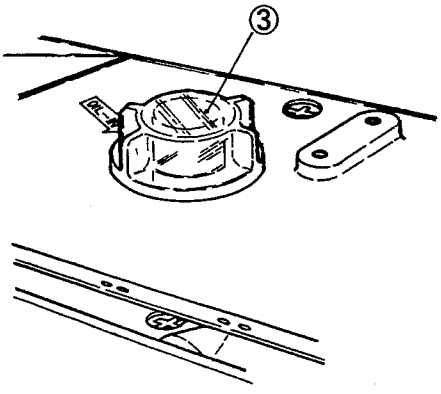
⚠CAUTION

NEVER add additives to the oil.
If added, it promotes the deterioration of the oil and causes a machine trouble.

4-2 Supplying oil







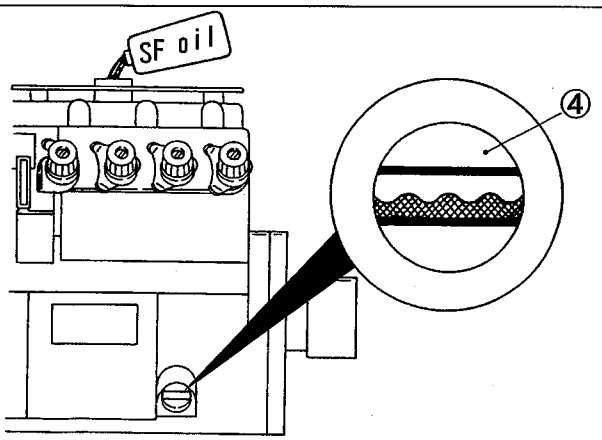
If you use a new machine or a machine which has not been run for a while, oil to the needle bar① and the looper bar② with 2 or 3 drops.

For supplying oil, remove the oil cap③ indicated 'OIL' and supply the oil until the upper line of the oil sight gauge④. After that, install the oil cap③.

When running the machine, check oil splashes from the nozzle inside of the oil cap③.
If oil does not come out from the nozzle, see the section **'4-4 Checking and replacing oil filter'** on page 11.

⚠CAUTION

Too much oil or not enough oil may cause oil leakage or machine trouble. Be sure to keep the oil level between the lines. If too much lubricating is done, oil may be scattered and material to be sewn may be stained.

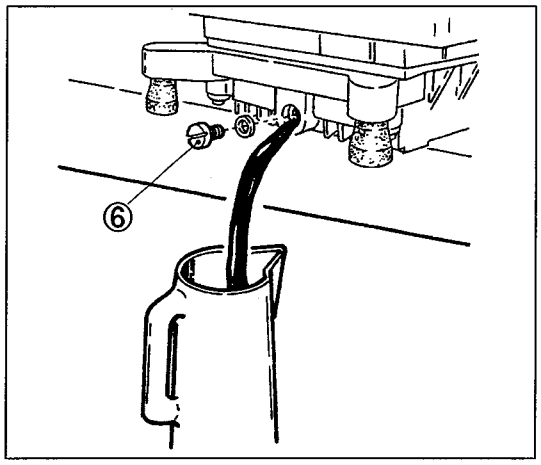


4 . Lubricating oil

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

4-3 Replacing oil

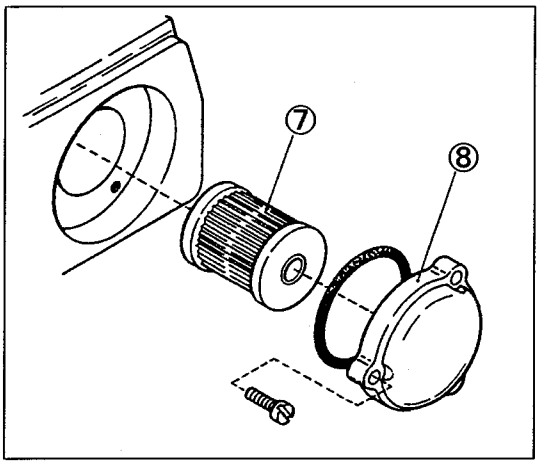


Oil should be replaced in one month since the machine began to be operated. After that, oil should be replaced every six months.

The procedure for replacement of oil is as follows:

(1) Remove the screw⑥ and drain away oil.
(2) Tighten the screw⑥.
(3) Supply new Yamato SF oil No.28. (See the section **'4-2 Supplying oil'** on page 10.)

4-4 Checking and replacing oil filter



If the oil filter⑦ is clogged with dust, lubrication can not be done properly. The oil filter cap⑧ and the oil filter⑦ should be removed to be checked every six months. If the filter⑦ is clogged or ripped, clean or replace it with a new one. And also, though oil is sufficiently kept, if splashed oil from the nozzle of the oil sight window are not enough or many bubbles are included, check or replace it.

NOTE

Take care not to spill oil stayed in the oil filter⑦.

5. Proper operation

5-1 Needle system

DC×27(or B27, 1886)
Depending on the weight and type of material to be sewn, the proper needle and size should be selected.

■Needle size

Japanese standard	8	9	10	11	12	13	14
Metric standard	60	65	70	75	80	85	90

5-2 Installing needle

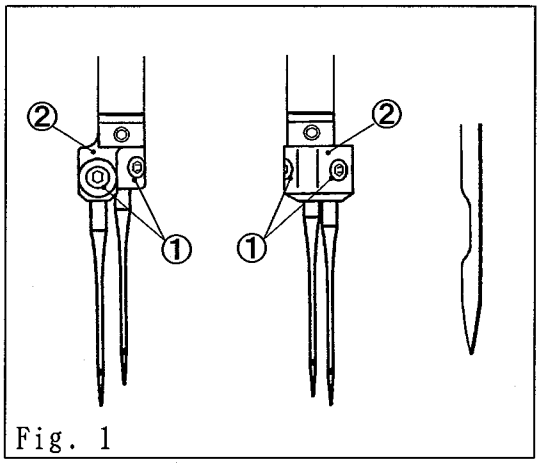


Fig. 1

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before installing the needles.

(1) Loosen the screw① with allen wrench. (Fig. 1)
(2) Remove the old needle with tweezers.
(3) See the figures 2 and 3 and insert a new needle into the needle clamp② with facing its scarf to the right back.
(4) Tighten the screw① with allen wrench.

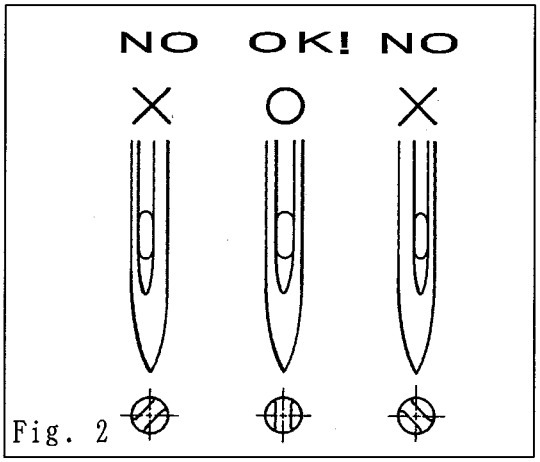


Fig. 2

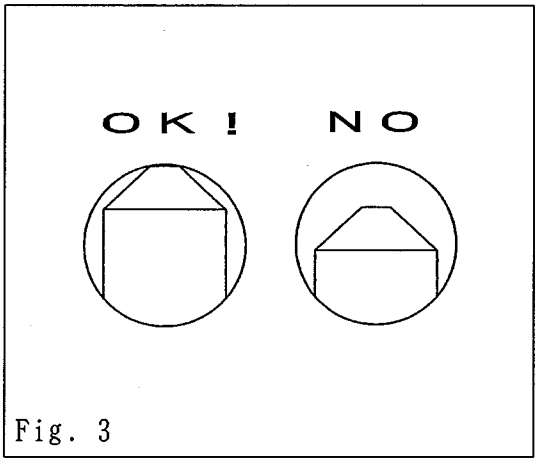
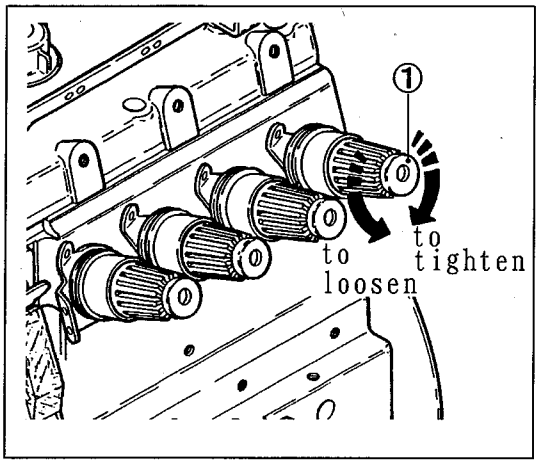


Fig. 3

5 . Proper operation

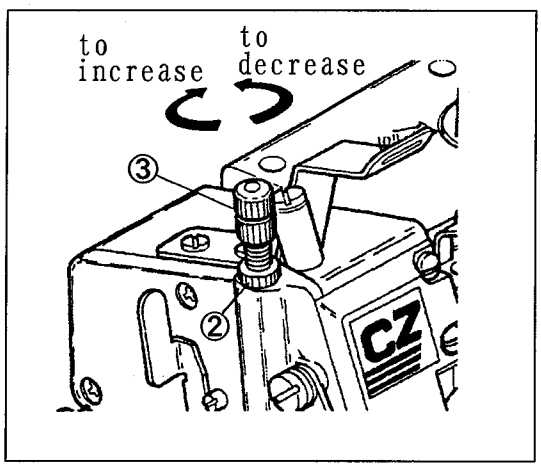
5-3 Adjusting thread tension



Thread tension should be adjusted with the thread tension spring caps① depending on thread type, fabric type, seam width, stitch length and other sewing conditions.

To tighten thread tension, turn the caps clockwise. To loosen, turn the caps counterclockwise.

5-4 Presser foot pressure

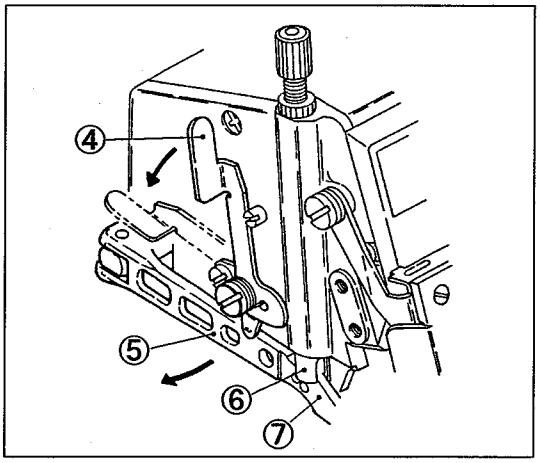


The pressure should be minimized so long as stable stitches can be performed.

(1) Loosen the lock nut②.

(2) To increase the pressure according to the fabric, turn the adjusting screw③ clockwise.
To decrease, turn it counterclockwise.

5-5 Releasing the presser foot



WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

Rotating the machine pulley and position the needle at the top point, then release the presser foot⑤ by sliding to the left with pressing the lever④.
For setting the presser foot, slide and push presser foot⑤ against to the right side with pressing the lever④.

CAUTION

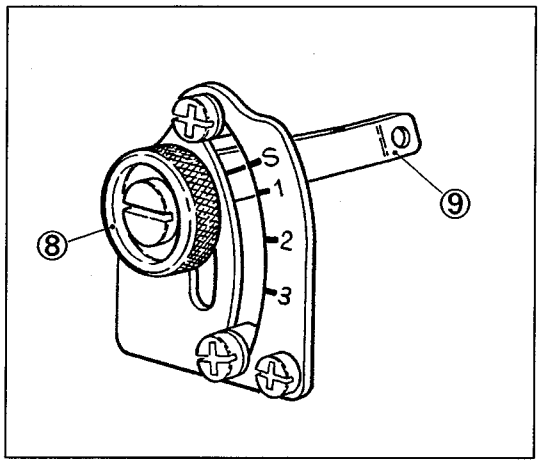
Make sure the presser foot arm⑦ is into the groove of the presser foot bar⑥.

5 . Proper operation

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

5-6 Adjusting movement of differential feed dog (differential feed)



☆ Loosen the lock nut⑧ on adjuster for movement of differential feed dog; moving up will make stretching, moving down will make gathering.

☆ When the differential feed lever⑨ is at the graduation 'S' stretching with the differential ratio 1:0.7 is obtained, and at the graduation '1' with the differential ratio 1:1 is obtained.

☆ For gathering, the differential feed lever⑨ should be at the graduation '3' and its differential ratio is 1:2.3.

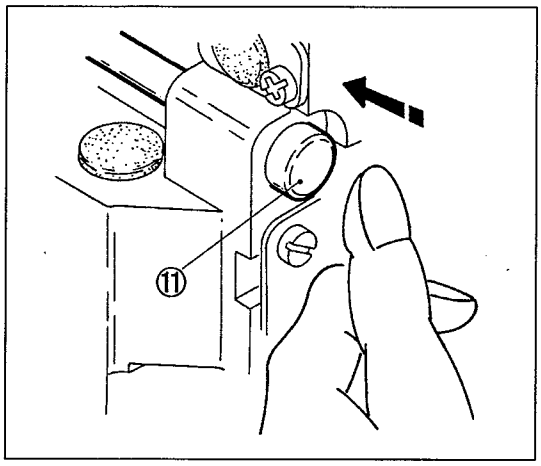
☆ Differential ratio up 1 : 0.6 - 1 : 2 and 1 : 1 - 1 : 3 is available by adjusting internal mechanism. See the page 33.

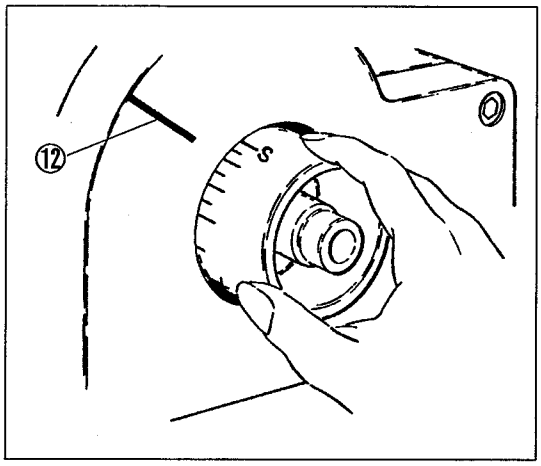
5 . Proper operation

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

5-7 Adjusting stitch length





Each graduation on the machine pulley indicates the length(mm) for one stitch. After sewing, the actual stitch length has difference with the length on graduation, it depends on the application, the type and weight of material to be sewn or the differential ratio.

1. Rotating the pulley with pushing the push button⑪ makes the button to get in place.
2. While keeping that placing, make desired graduation of pulley to correspond to the notch mark⑫ on belt cover by rotating the pulley.
3. After adjusting stitch length, release the pushbutton⑪.

CAUTION

After adjusting stitch length, make sure the pushbutton⑪ is released completely and the pulley rotates smoothly.

Stitch length can be adjustable from 1.0 mm to 4.0 mm. The following chart shows the number of stitches per inch (25.4 mm) and 30 mm converted stitch length.

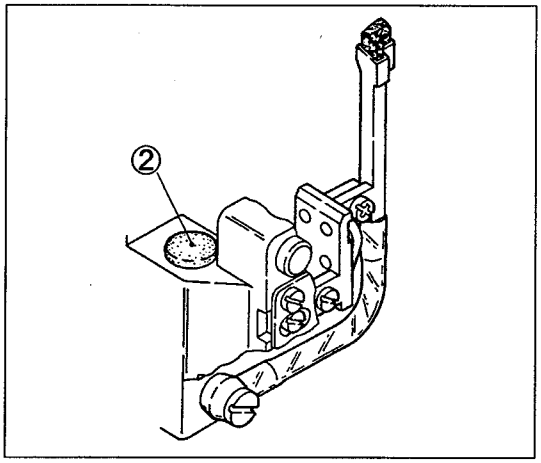
stitch length (mm)	number of stitch per	
	inch	30 mm
1.0	25	30
2.0	12	15
3.0	8	10
4.0	6	7.5

5 . Proper operation

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

5-8 HR device



The HR device 〈needle point cooling〉 equipped as standard (excluded some models) should be used to prevent thread breakage and skipping stitch, when running the machine at high speed or using synthetic thread and/or synthetic fabric.
The dimethyl silicone oil should be used for this device.

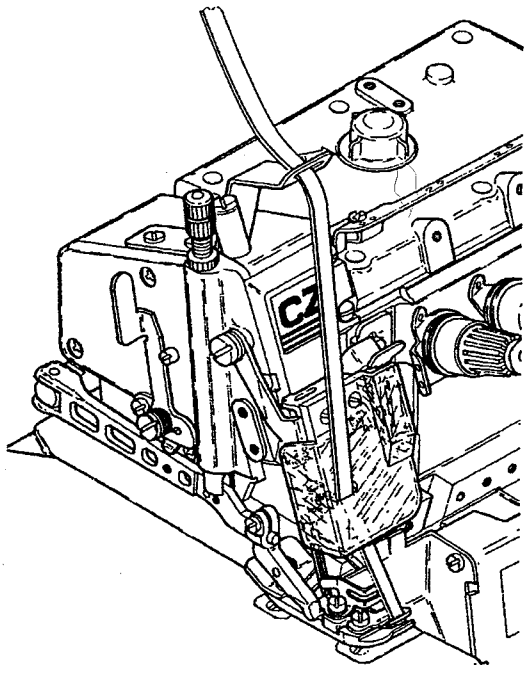
Oil level in HR device also should be checked periodically with opening cover②.

CAUTION

If the silicone oil is sticked to the parts other than the HR device, it causes machine trouble. Be sure to wipe it away.

5-9 Inserting tape for CZ6025

Insert a tape referring to the figure.



5 . Proper operation

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

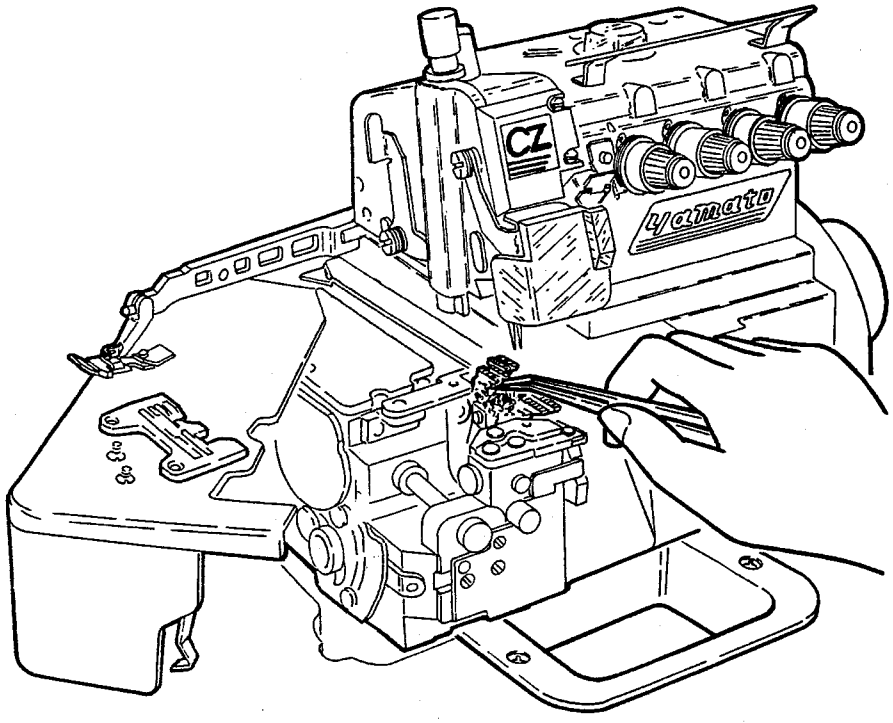
5-10 Cleaning the machine

Clean waste thread and dust inside of the machine at the end of work each day.

Clean the grooves in the stitch plate, feed dog area, and oil filter screen area once a week.

NOTE

If the oil filter screen is clogged with dust, oil in the machine frame does not return to the oil reservoir. It may cause oil leakage.

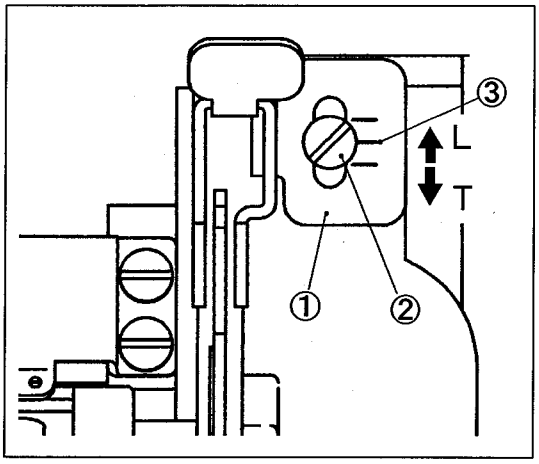


6 . Adjustment of sewing machine

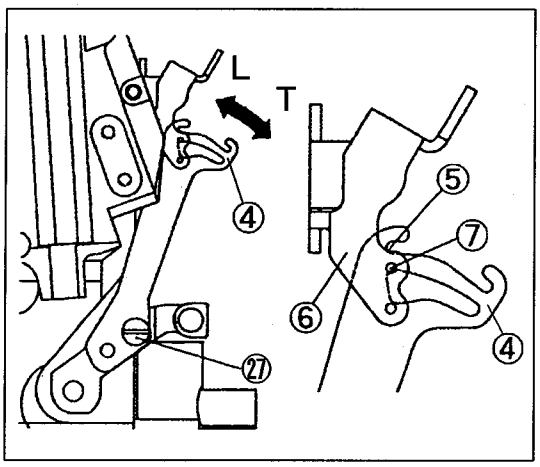
WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

6-1 Needle thread tension for overlock stitch



☆ At standard position of needle thread eyelet①, the center of screw② corresponds to the notch mark③.



☆ At the standard position of needle thread pull-off④, the point⑤ of thread pull-off aligns with the eye⑦ of needle thread eyelet(right)⑥ when the needle thread pull-off④ comes forward completely. To adjust it, loosen the screw㉗.

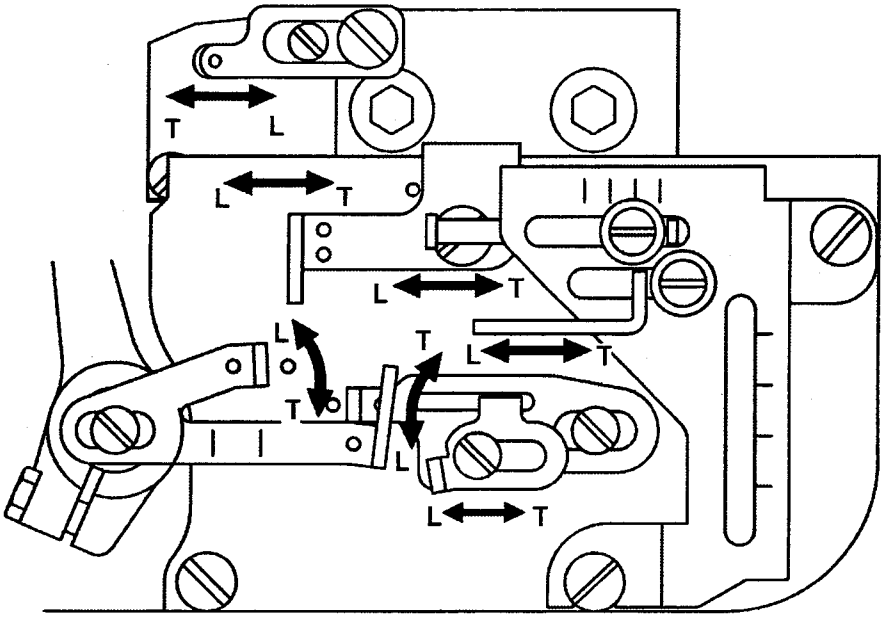
* Moving the needle thread eyelet and the needle thread pull-off to the direction "T" tightens the needle thread tension and moving them to the direction "L" loosens the needle thread tension.

6 . Adjustment of sewing machine

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

6-2 Looper thread tension for overlock stitch



The standard setting of each needle thread eyelet is as follows;

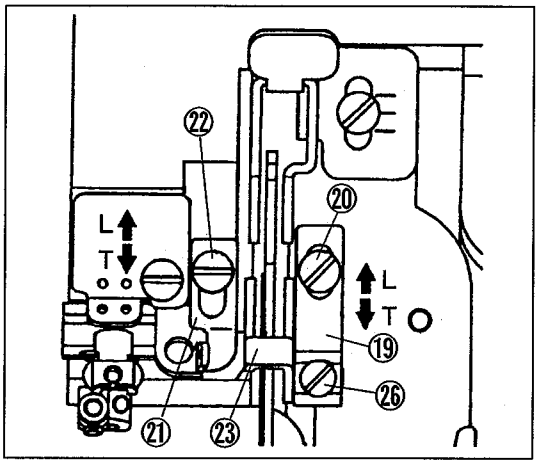
Moving each thread eyelet or thread pull-off to the direction " T " tightens the thread tension and moving them to the direction " L " loosens the thread tension.

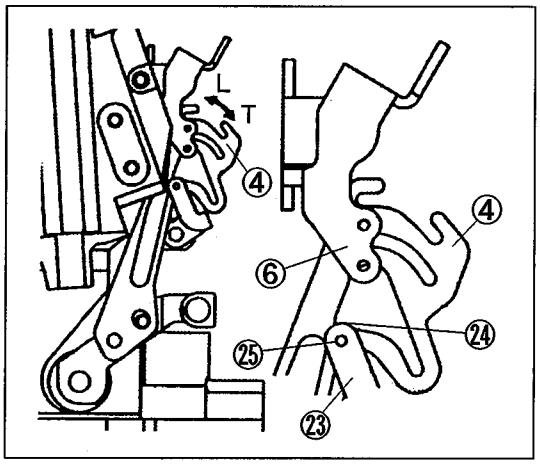
6 . Adjustment of sewing machine

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

6-3 Needle thread tension for double chainstitch





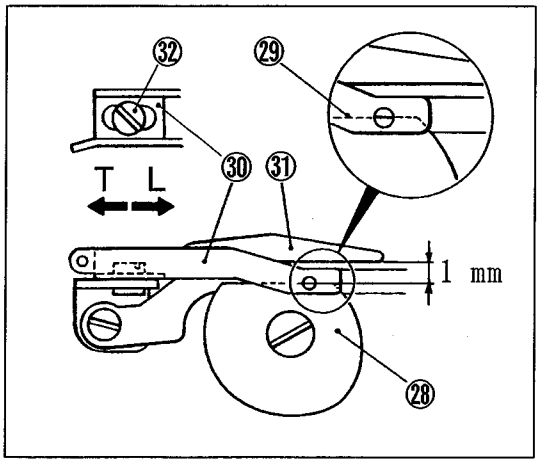
☆ At the standard position of the needle thread eyelet(right)⑲, the center of slot on the eyelet corresponds to the center of screw⑳.

☆ Adjust the double chainstitch needle thread eyelet(left)㉑ to make the needle thread of double chainstitch being level with the eyelet㉑ at the top dead point of needle bar. To adjust it, loosen the screw㉒.

☆ At the standard position of the needle thread eyelet(right)㉓, the eye㉕ of the needle thread eyelet(right)㉓ corresponds to the portion㉔ of the needle thread pull-off④ when the needle thread pull-off④ is at the most forward position.

＊ Moving the needle thread eyelet and the needle thread pull-off to the direction "T" tightens the needle thread tension and moving them to the direction "L" loosens the needle thread tension.

6-4 Looper thread tension for double chainstitch



Adjust the eye of looper thread eyelet㉚ to correspond to the surface㉙ of looper thread take-up at the point of looper thread take-up㉘ being level.

Position the thread retaining finger㉛ at the point 1mm above the eye of looper thread eyelet㉚.

The center of slot on looper thread eyelet㉚ corresponds to the center of screw㉜, it is at the standard position.

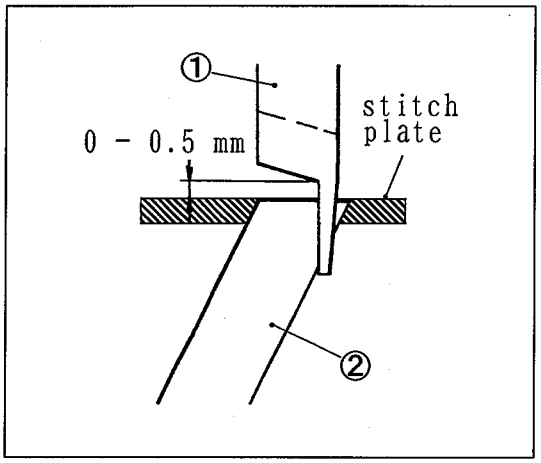
Moving the looper thread eyelet㉚ to the direction "L" loosens the looper thread tension and moving it to the direction "T" tightens the looper thread tension.

6 . Adjustment of sewing machine

⚠ WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

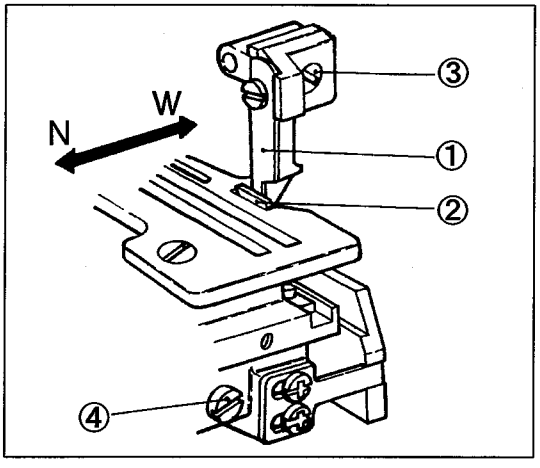
6-5 Adjusting the width of overedge seam



Before making adjustment, set the upper knife① to the position of its blade 0 - 0.5 mm above the lower knife② by rotating the machine pulley with manually.

☆ To make wide overedge seam;

1. Loosen the screw③ on upper knife holder.
2. Move the holder to the direction "W" as desired and tighten the screw③.
3. Loosen the screw④ on lower knife holder.
4. The lower knife sticks to the upper knife① with the pressure of spring.
5. Tighten the screw④.



☆ To make narrow overedge seam;

1. Loosen the screw④ on lower knife holder.
2. Move the holder to the direction "N" as desired and tighten the screw④ slightly.
3. Loosen the screw③ on upper knife holder.
4. Tighten the screw③ with holding the upper knife① against to the lower knife②.
5. Loosen the screw⑤.
6. The lower knife② sticks to the upper knife① with the pressure of spring.
7. Tighten the screw④.

⚠ CAUTION

1. After changing the width of overedge seam, test the sharpness of blade by setting the thread between the upper and lower knife and rotating the machine pulley with manually.
2. Use a suitable stitch plate for a desired width of overedge seam.
3. Becoming dusty at the connecting part of the upper knife holder changes the installing angle of it and the cutting quality gets worse, therefore clean the part by loosening the screw③.

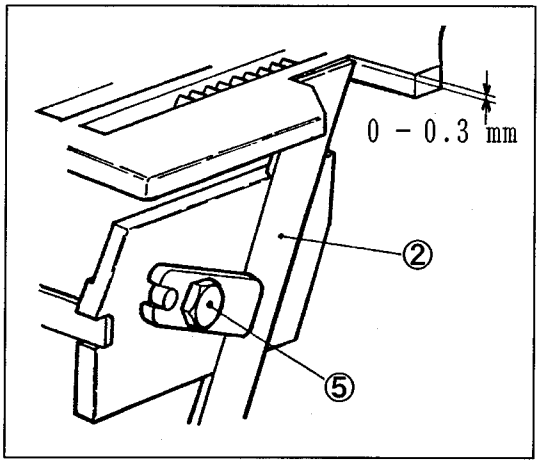
6 . Adjustment of sewing machine

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

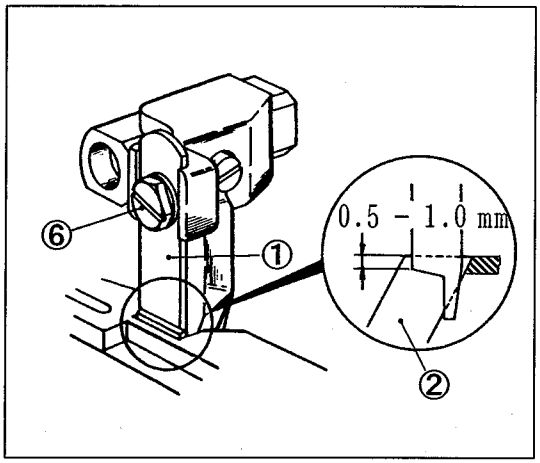
6-6 Adjustment of knives

6-6-1 Height of lower knife



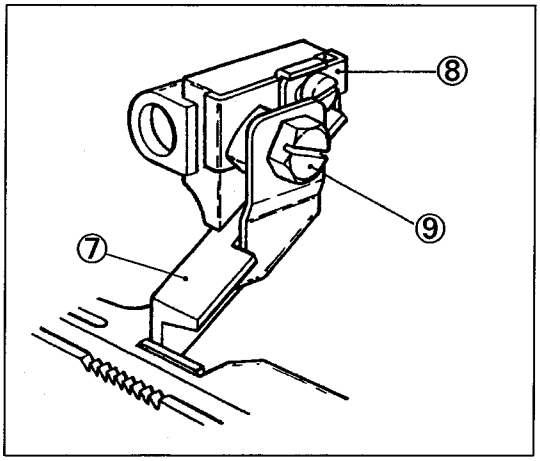
Install the lower knife at the position where the tip of blade is at the same height with the top surface of stitch plate or a little bit lower than it(0 - 0.3 mm).
To adjust it, loosen the screw⑤.

6-6-2 Height of upper knife(flat type)



Loosen the screw⑥ and adjust the height of flat type upper knife① to have the engagement of 0.5 - 1.0 mm with the lower knife② at the lowest position of upper knife.

6-6-3 Height of upper knife(angled type)



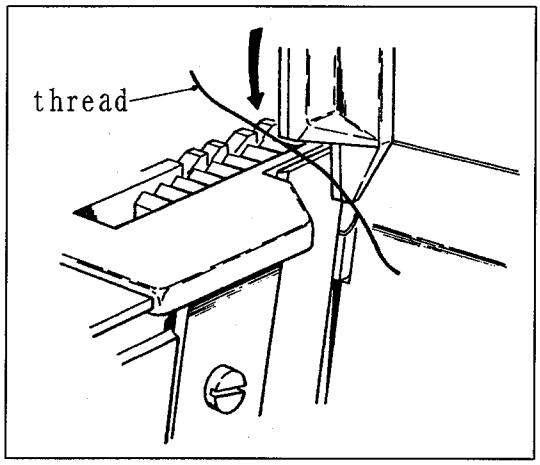
The height of the angled type upper knife⑦ can be adjusted by upper knife stopper⑧.
To install the angled type upper knife⑦, loosen the screw⑨ and insert the knife⑦ completely against to the stopper⑧, then tighten the screw⑨.

6 . Adjustment of sewing machine

WARNING

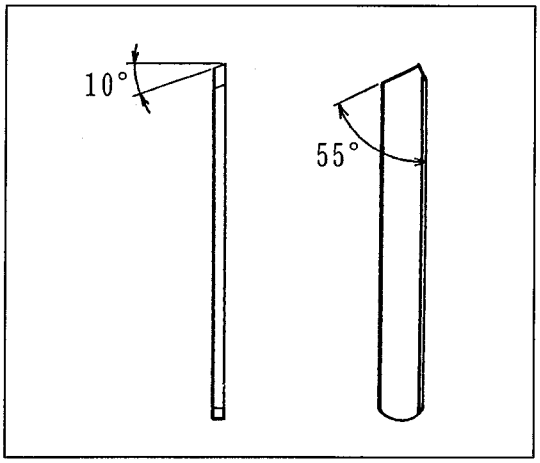
ALWAYS turn OFF the motor switch and check that the motor stops before the work.

6-6-4 Sharpness of knives



After changing the width of overedge seam, test the sharpness of blade by setting the thread between the upper and lower knife and rotating the machine pulley with manually.

6-6-5 Sharpening of knives



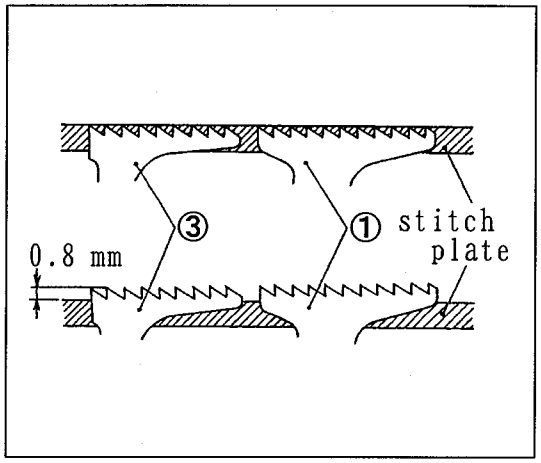
The upper knife is made of super hard alloy, so it isn't necessary to re-sharpen the knife for about one year.
If the sharpness of knives get blunt during this period, re-sharpen the lower knife.
To re-sharpen, see the left fig.
For re-sharpening the upper knife normal grinder is not useful, so it is recommended to keep the upper knife as a spare part, and contact us directly or the dealer for re-sharpening it.

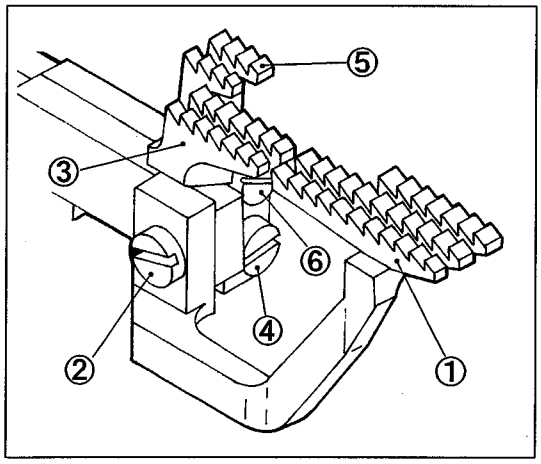
6 . Adjustment of sewing machine

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

6-7 Height of feed dogs





As raising of the feed dogs they pass the same height point with the top surface of stitch plate, and at the point the top surfaces of feed dogs are in parallel with the surface of stitch plate, it is at the standard setting of feed dogs.

At top dead point of the feed dogs moving, the rear part of main feed dog③ is 0.8mm above the top surface of stitch plate.

CZ6000: Install the auxiliary feed dog⑤ 0.5 mm below the main feed dog③.

CZ6500: Install the auxiliary feed dog⑤ same level as the main feed dog③.

For adjusting the differential feed dog① loosen the screw②, for the main feed dog③ loosen the screw④ and for the auxiliary feed dog⑤ loosen the screw⑥.

CAUTION

1. Make sure there is no difference of installing height between the main feed dog③ and the differential feed dog①.
   If different height between them, may cause the unstable feeding and the damage by feeding.
2. For sewing heavy weight knitted fabric or the material having uneven thickness parts, install the differential feed dog① and the main feed dog③ at the higher position than usual(1.0mm above the top surface of stitch plate).

6 . Adjustment of sewing machine

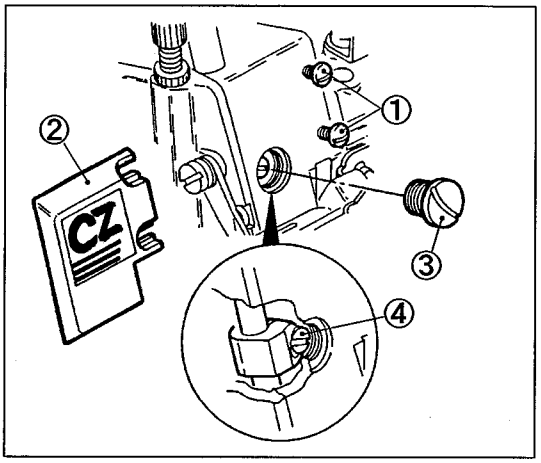
WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

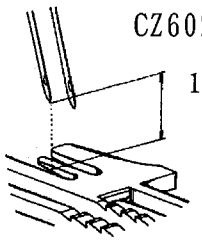
6-8 Adjustment of needle and looper

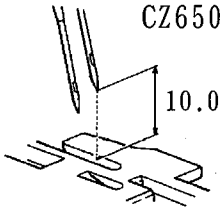
Adjustment for CZ series should be done as following steps;

1. Height of needle
2. Angle for installing lower looper
3. Distance between needle and lower looper
4. Longitudinal position of needle and lower looper
5. Position of upper looper bar guide bushing
6. Timing between needle and upper looper
7. Longitudinal position of upper looper
8. Timing between lower looper and upper looper



6-8-1 Height of needle





1. Loosen the screws① and remove the logo plate②.
2. Remove the screw③.
3. Rotate the machine pulley and position the needle bar at the top dead point
4. Loosen the screw④ and move the needle bar up and down to adjust it.

With the top dead point of needle bar, adjust the height from the top surface of stitch plate to the tip of needle to be;

10.0 - 10.3 mm《For CZ6020 class》
10.0 - 10.3 mm《For CZ6500 class》

CAUTION

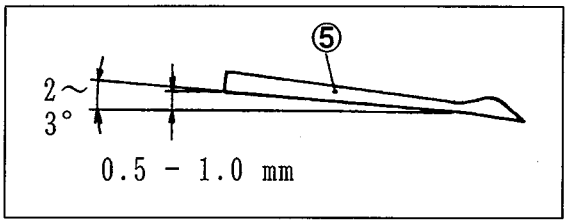
The tightening torque of screw on needle bar connecting bracket is 1.5N·m(15kgf·cm).

6 . Adjustment of sewing machine

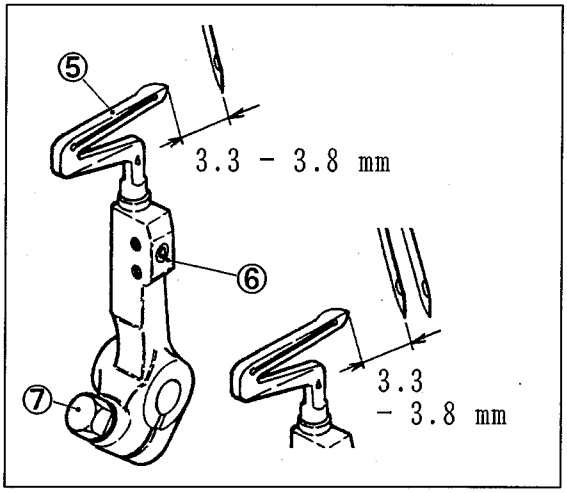
WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

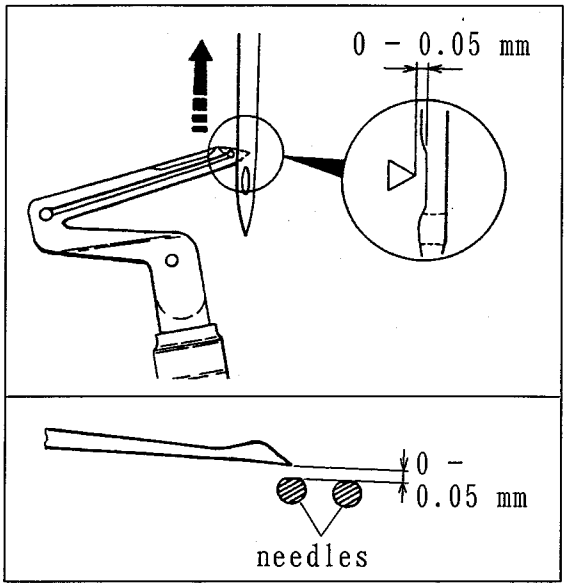
6-8-2 Angle for installing lower looper

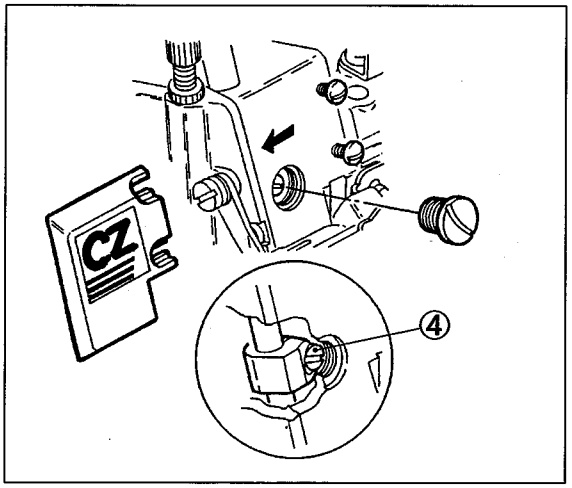


6-8-3 Distance between needle and lower looper



6-8-4 Longitudinal position of needle and lower looper



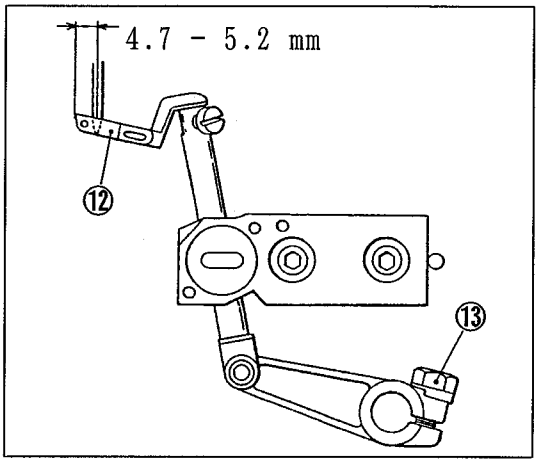


6 . Adjustment of sewing machine

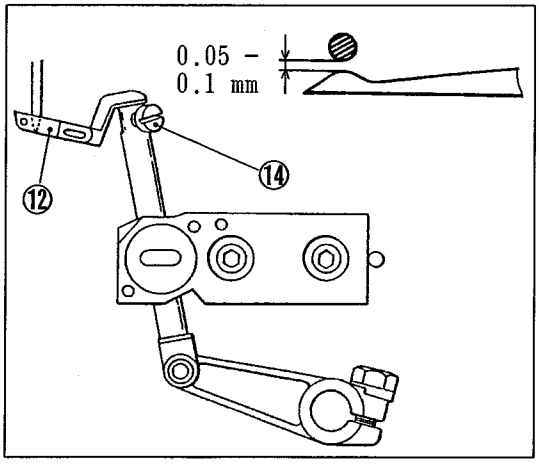
WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

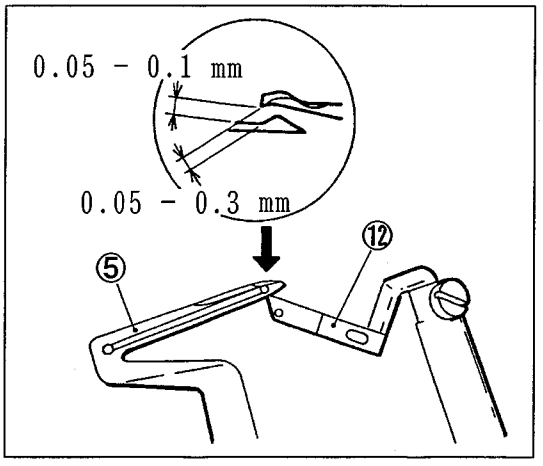
6-8-5 Timing between needle and upper looper



6-8-6 Longitudinal position of upper looper



6-8-7 Timing between lower looper and upper looper

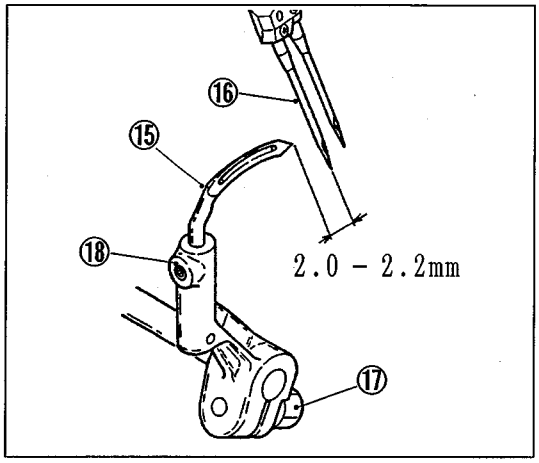


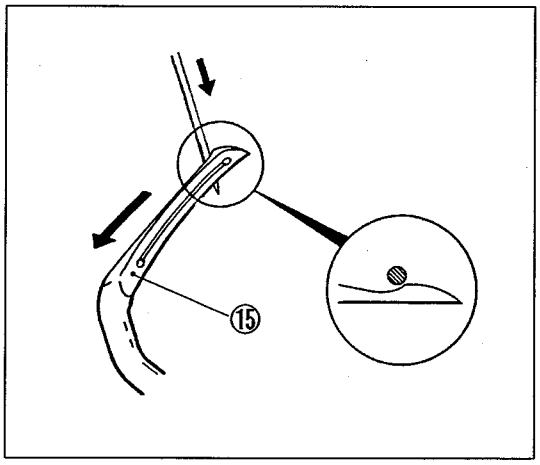
6 . Adjustment of sewing machine

WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before the work.

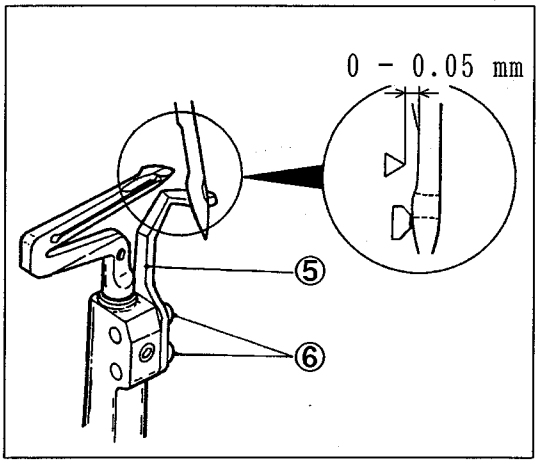
6-9 Needle and double chaining looper



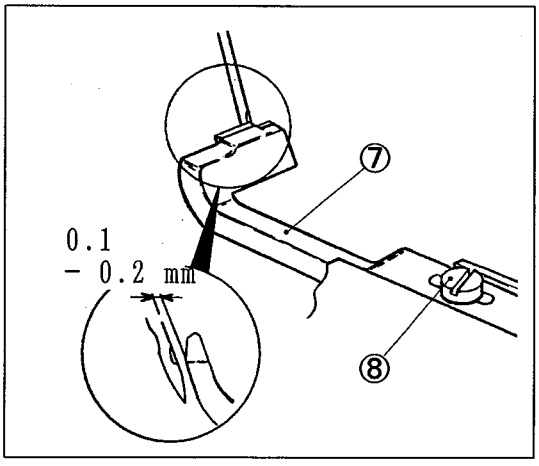


6-10 Needle and needle guard for CZ6000

Needle and needle guard(rear)



Needle and needle guard(front)



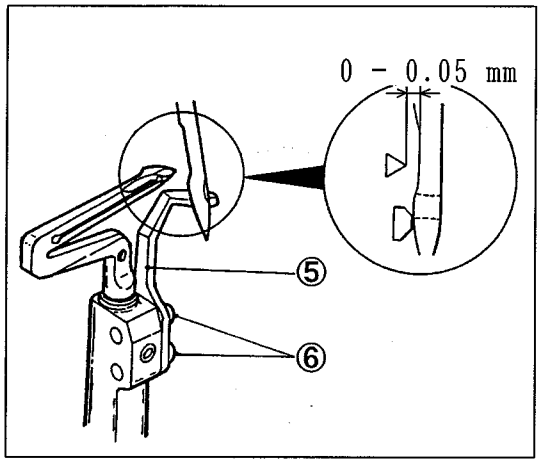
6 . Adjustment of sewing machine

WARNING

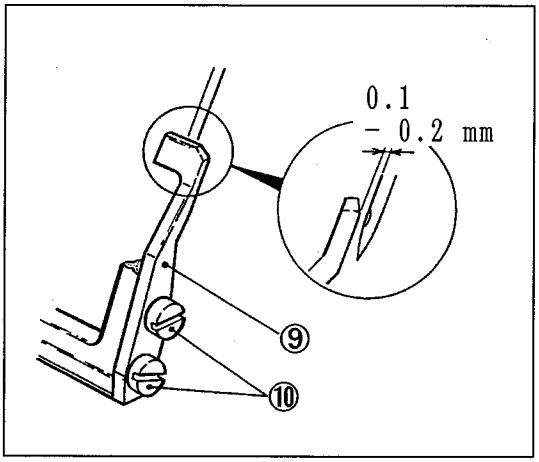
ALWAYS turn OFF the motor switch and check that the motor stops before the work.

6-11 Needle and needle guard for CZ6500

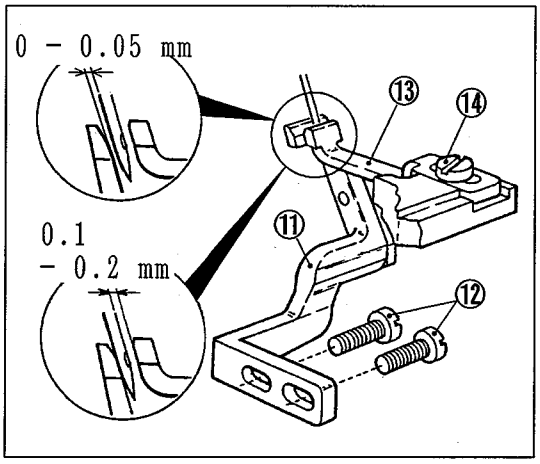
Needle and needle guard(rear)



Needle and needle guard(front)



Needle and needle guard for double chainstitch



7. Specifications

Model	CZ6000·CZ6500
Description	Overlock & Safety Stitch Machine
Dimensions	380(L) × 245(W) × 310(H) mm
Weight	CZ6000 Class : 26.5kg, CZ6500 Class : 27kg
Construction	Dust-proof, Oil-tight and Completely Sealed
Stitch Type	CZ6000 Class : 504, 505, 512, 514 CZ6500 Class : (504·401)
Application	Overlock stitch or Safety stitch sewing on knitted or woven fabrics
Sewing Speed	Up to 6,500 r.p.m.
Stitch Length	1.0 - 4.0 mm 6.5 - 25 stitches per inch 7.5 - 30 stitches per 30 mm
Needle System	DC×27 for both sides of overlocking and double chaining, Size 60 - 90 (#8 - 14)
Needle Stroke	23.7 mm
Presser Foot Lift	6.0 mm (max.)
Adjustment of Feeding Mode	Push Button System
Differential Ratio	Normal Differential (Gathering) 1 : 2.3 (max.) Reverse Differential (Stretching) 1 : 0.7 (max.) (1 : 0.6 is available by adjusting the position of lever pin on main feed dog)
Adjustment of Differential Feeding	Adjustment during the rotation is also available by lifting and lowering the lever.
Knives for Cutting Fabric	Lower Knife : Flat Type, made of Special Steel Upper Knife : Flat or Angled Type, made of Super Hard Alloy
Lubrication	Automatic Lubrication System (Forced fed by Trochoide-shaped Pump)
Lubrication Oil	YAMATO SF OIL No.28
Capacity of Oil Reservoir	900cc
Installation	Table top type Fully-submerged type / Semi-submerged type

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