

# Instruction Manual

High speed overlock machine

# CZ6120

Adjustmens different from CZ6000 are mentioned in this book. Read this book in combination with INSTRUCTION and PARTS LIST of CZ6000.

Bofore using this sewing equipment, please read the instruction manual and understand the contents well.

After reading the instruction manual, please keep it in a location where it is easy to access for operators.

🍟 YAMATO SEWING MACHINE MFG. CO.,LTD.

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#### Attention

◇This instruction manual is designed mainly for operators. It is advisable that operators read the instructions with mark to use the machine properly.

#### Attention

The description in this instruction manual is subject to change for improvements of the commodity without notice.

# **1**.Sewing speed and rotating direction of pulley

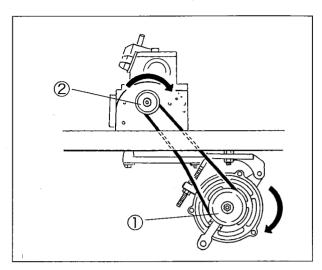
The maximum sewing speed is shown in the table below.

Run the new machine with rpm lowered 15 - 20% of the 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.

The rotating direction of the motor pulley ① and the machine pulley ② is clockwise as shown in the figure.

**A**CAUTION

If rotating in riverse direction, oil can not be supplied properly. It can cause the machine to damage.



Model	Max. sewing speed (rpm)
CZ6120	6000

# 2.Adjustment of sewing machine

## WARNING -

ALWAYS turn the motor switch OFF and check that the motor has already stopped before operating.

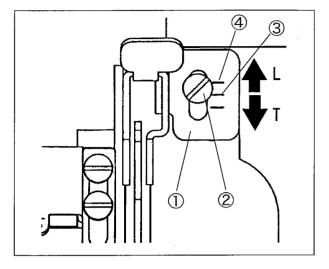
## 2.1 Needle thread tension for overlock stitch

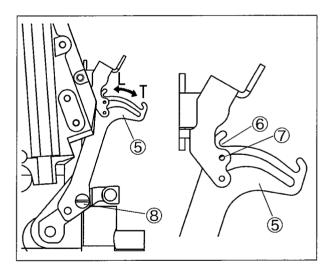


To set the standard position of the needle eyelet ①, position the center of the screw② between the notch marks③ and ④.

To set the standard position of the needle thread pull-off(5), align the portion(6) with the eye(7) of the needle thread eyelet(right) at the most front ward position of the needle thread pull-off(5). Loosen the screw(8) to adjust it.

- To loosen the needle thread tension, move the needle thread eyelet and the needle thread pulloff in the direction "L".
- To tighten the needle thread tension, move them in the direction "T".



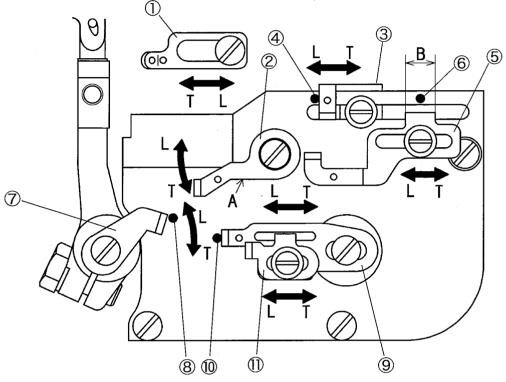


## - 🖄 WARNING —

ALWAYS turn the motor switch OFF and check that the motor has already stopped before operating.

## 2.2 Looper thread tension for overlock stitch





#### The standard setting of each needle thread eyelet :

- Upper looper supplementary thread eyelet ① Move it to the extreme left.
- Looper thread eylet(left)②
  Set the part A horizontally.
- Upper looper thread eyelet ③
  Move the left end to the notch mark ④.
- 4 Lower looper thread eyelet(5) Make the center of the part B to the notch mark(6).
- Looper thread pull-off (7)
  Move the right end to the notch mark (8).
- 6 Upper looper thread pull-off (9) Align the eye of the thread pull-off with the notch mark (10) when the lower looper moves to the extreme right.
- 7. Lower looper thread pull-off 1
- Tighten it with the screw at the center of the slot.
- To tighten the thread tension, move each thread eyelet and thread pull-off in the direction "T".
- ullet To loosen the thread tension, move them in the direction "L".

## - 🖄 WARNING ------

ALWAYS turn the motor switch OFF and check that the motor has already stopped before operating.

## 2.3 Adjusting needles and loopers

Adjust them as follows;

- 1. Height of needles
- 2. Installing angle of lower looper
- 3. Distance between needles and lower looper
- 4. Front-and-rear position of lower looper
- 5. Distance between needles and upper looper
- 6. Front-and-rear position of upper looper
- 7. Timing between lower looper and upper looper

### 2.3.1 Height of needles

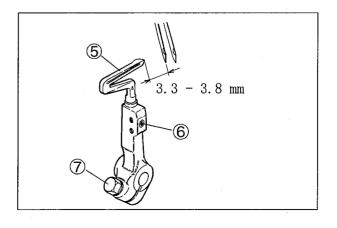
- 1. Loosen the screws (1) and remove the logo plate (2).
- 2. Remove the screw ③.
- 3. Position the needle bar at the highest point while rotating the machine pulley.
- 4. Loosen the screw ④ and adjust the needle bar while moving it up and down.

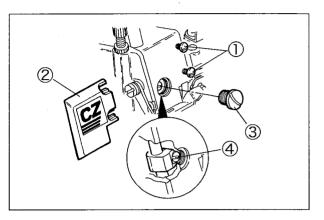
When the needle bar is at the highest point, adjust the height from the top surface of the stitch plate to the needle tip to 10.7 - 11.0 mm.

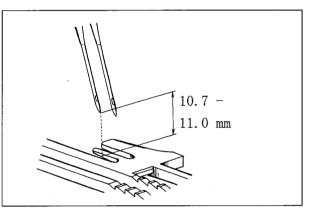


The tightening torque of the screw ④ on the needle bar connecting bracket is 1.5N-m(15kgf-cm).

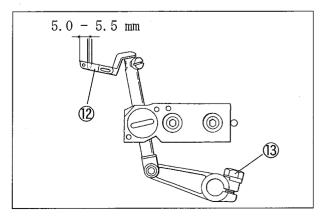
### 2.3.2 Distance between needles and lower looper







### 2.3.3 Distance between needles and upper looper



Model	CZ6120
Dimensions	380 (L) ×245 (W) ×310 (H) mm
Weight	27 kg
Construction	Dust-proof, Oil-tight and completely sealed
Stitch Type	ISO : 514
Application	Overlock sewing for knitted or woven farics with seam width
Sewing Speed	Up to 6000 rpm
Stitch Length	1.0-4.0 mm 6.5 - 25 stitches per inch(25.4 mm) 7.5 - 30 stitches per 30 mm
Needle System	DC×27 Size 60 - 90 (#8 - 14)
Needle Stroke	24.7 mm
Presser Foot Lift	Max. 6.0 mm
Feed Regulation	Push button System
Differential Ratio	<pre>Max. normal differential (Gathering) : 1: 2.3 (1:3 is available by adjusting the position of the lever pin on the main feed dog.) Max. reverse differential (Stretching) : 1: 0.7 (1:0.6 is available by adjusting the position of the lever pin on the main feed dog)</pre>
Differential Feed Regulation	Adjustable by moving external lever even during operation Adjustable by the Micro adjuster to make fine adjustment
Knives for Fabric Cutting	Lower Knife : Flat Type, made of Special Steel Upper Knife : Flat or Angled Type, made of Super Hard Alloy
Lubrication Oil	YAMATO SF OIL No. 28
Capacity of Oil Reservoir	900cc
Lubrication	Oil is fed forcedly by a trochoide-shaped pump and splashed.
Installation	Table top type : Fully-submerged type or Semi-submerged type

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