

EXT5100 Series

Maintenance manual

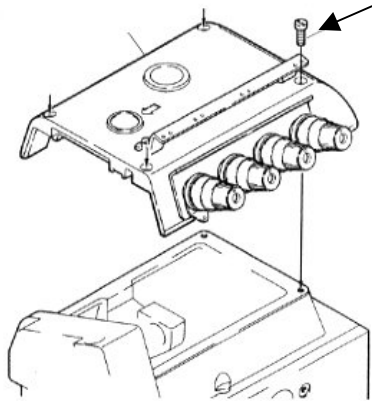


Content

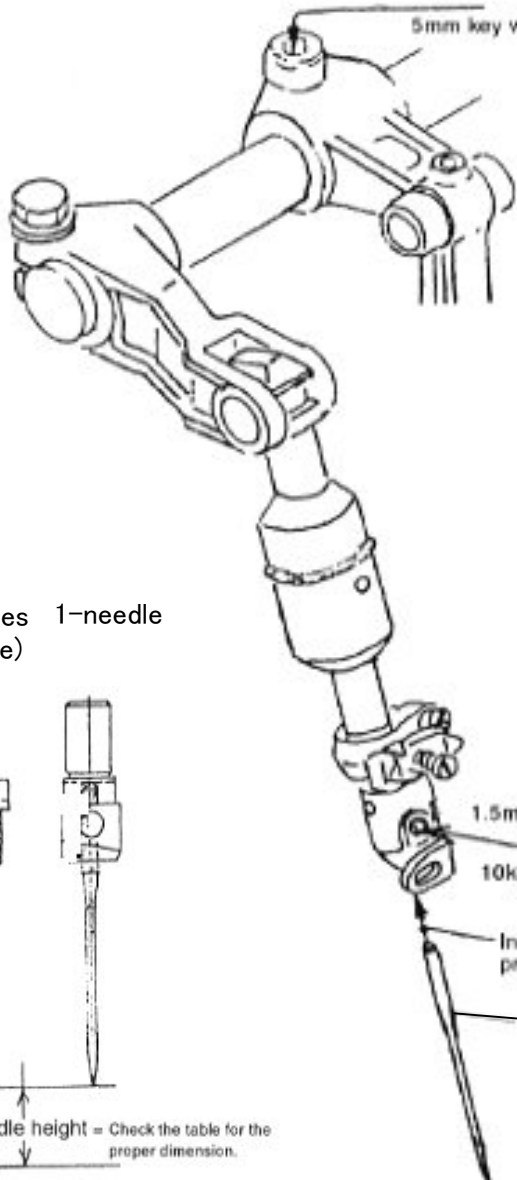
- (1) Adjusting the needle height**
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- (3) Installing the overedger needle guard (rear)**
- (4) Installing the upper looper**
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(1) Adjusting the needle height

1) Removing the top cover assembly.
Remove four screws.



③

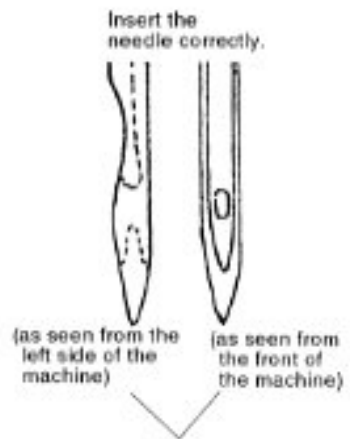
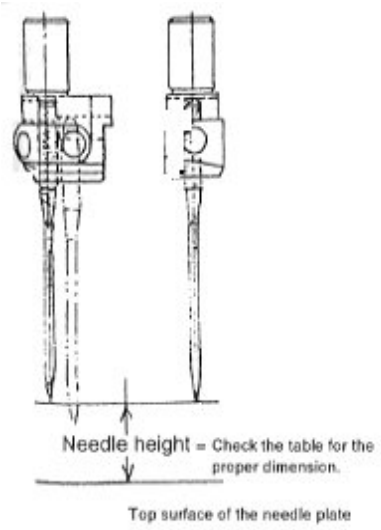


2) Check needle ① carefully to see if the scarf is turned to the rear of the machine.
Insert needle ① to the proper depth and tighten screw ② at 10kg-cm with a 1.5mm key wrench.

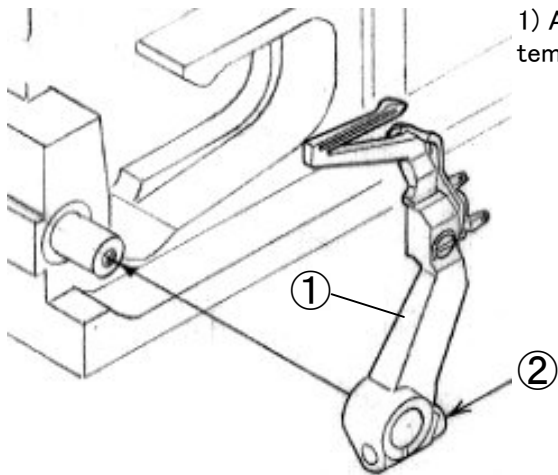
3) Loosen screw ③. Adjust the needle height when the needle is at the highest position of its travel (see the table for the proper dimension). Then tighten screw ③ at 120kg-cm with a 5mm key wrench.

4) Remove the needle plate.

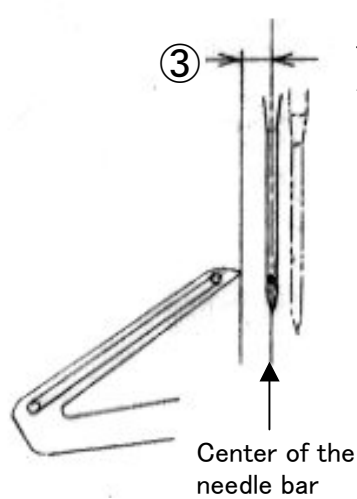
2-needles 1-needle
(left side)



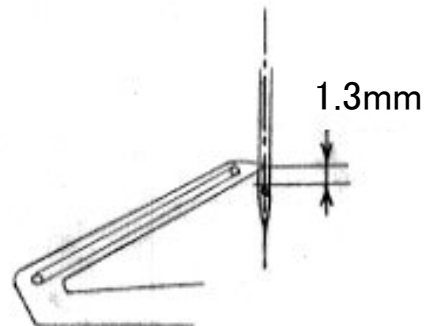
(2) Installing the lower looper holder



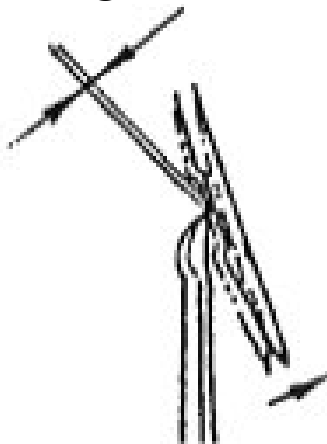
1) Assemble lower looper holder ① and tight screw ② temporarily.



2) Adjust setting distance ③ of lower looper by referring to the table.
After all, lower looper will be passing 1.3mm high position from the 1st of needle hole.



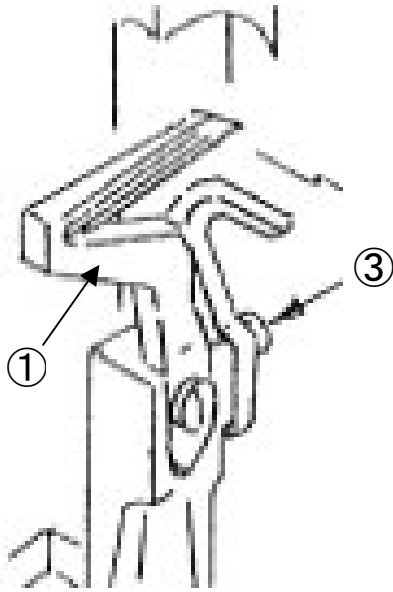
④ 0 ~ 0.03mm



3) The front-to back adjustment of lower looper ④ is when the point of the looper is aligned with the center of the needle.
There should be a 0~0.03mm clearance between the point of the lower looper and the center of the needle.

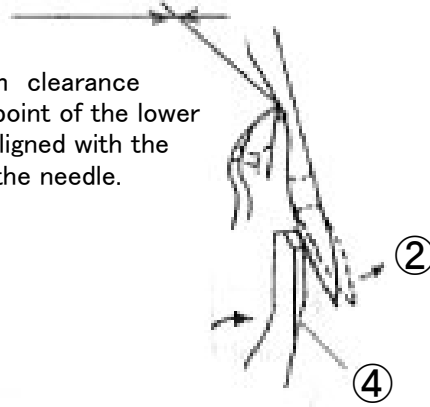
4) Tighten screw ② at 80kg-cm with a 8mm wrench.

(3) Installing the overedger needle guard (rear)

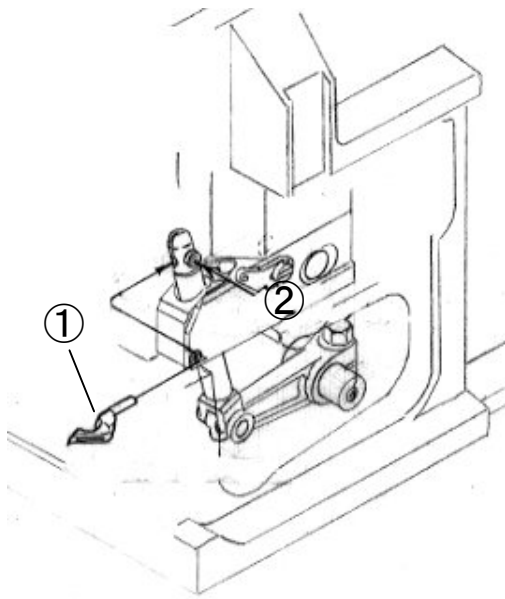


1) This installation is when the point of lower looper ① is aligned with the center of the needle. The needle should be deflected forward by needle guard (rear) ④ so that there will be 0~0.05mm clearance between the point of the looper and center of the needle (see below ②). Then tighten screw ③ at 25kg-cm.

0~0.05mm clearance when the point of the lower looper is aligned with the center of the needle.

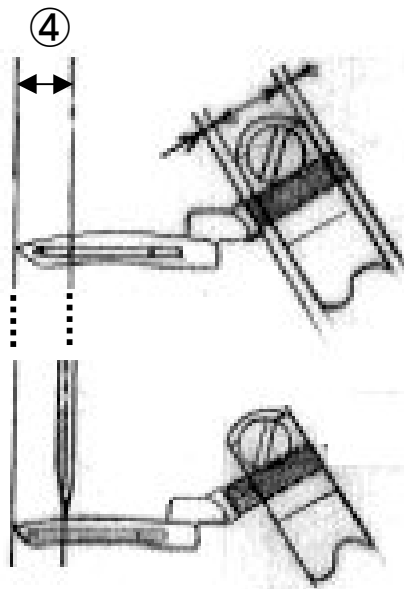
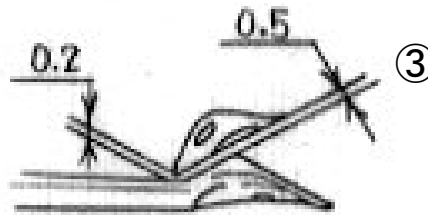


(4) Installing the upper looper



1) Position upper looper ① and tighten screw ② temporarily.

2) Be sure clearance ③ are maintained when the upper looper crosses behind the lower looper. Then confirm distance ④ between the center of the needle and the point of the upper looper is proper when upper looper ① is at its farthest position to the left (refer to the table).

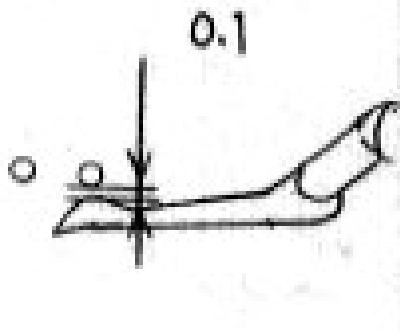


This looper setting is high lift model for looper capacity.

Example: EX(T)5114-03/333-2x4

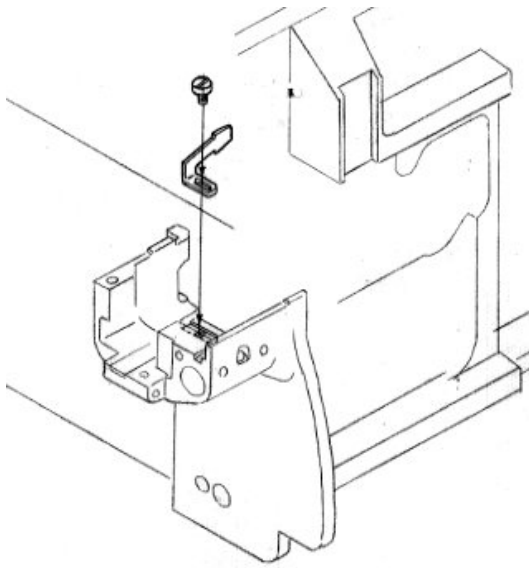
↑
This number is looper capacity.

This looper setting is standard & super high lift model for looper capacity.

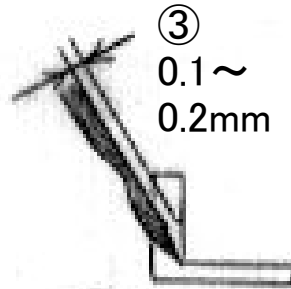


3) After all, confirm 0.1mm clearance between needle of front surface and looper of behind surface.

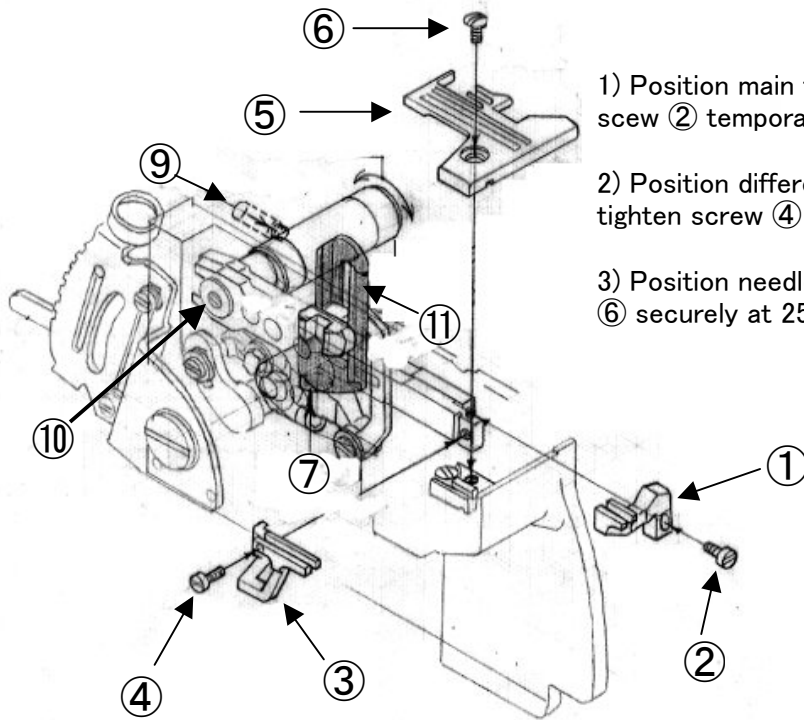
(5) Installing the overedger needle guard (front)



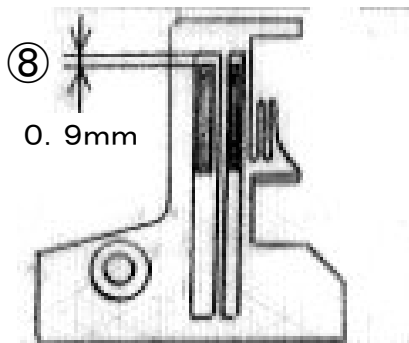
1) Position overedger needle guard (front) ① with a 0.1~0.2mm clearance between the needle guard (front) and needle (see ③).
Tighten screw ② at 25kg-cm.



(6) Installing the needle plate and feed dogs



- 1) Position main feed dog ① and tighten screw ② temporarily.
- 2) Position differential feed dog ③ and tighten screw ④ temporarily.
- 3) Position needle plate ⑤ and tighten screw ⑥ securely at 25kg-cm.

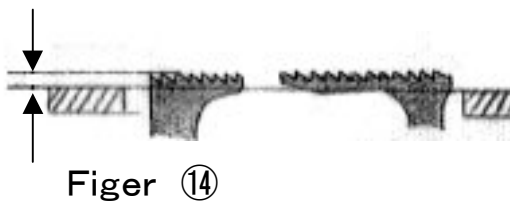


- 4) Check to see 0.9mm clearance if the main feed dog is moved at end in the needle plate slots ⑧ when setting the feeding amount for the maximum. To make this adjustment loosen screw ⑦ and move crank ⑪ front and back. After the adjustment tighten screw ⑦ at 80kg-cm with a 5mm key wrench.

- 5) To make the feed dog tilt adjustment loosen screw ⑨ and turn screw ⑩ as required. After the adjustment tighten screw securely at 25kg-cm.

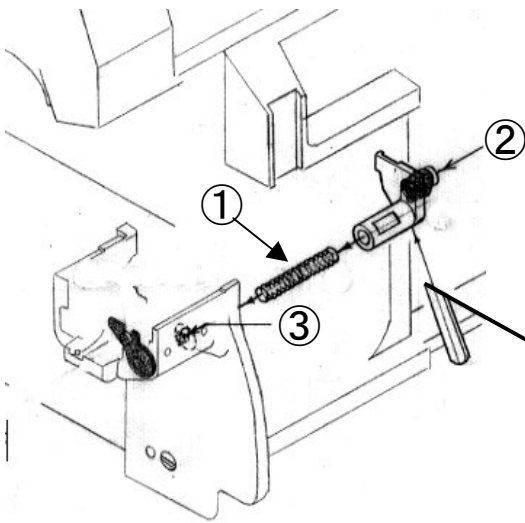


- 6) To make the feed dog height adjustment extend two or three main feed dog teeth from the rear end correctly above the top surface of the needle plate when the main feed dog reaches the highest position of its travel (see figure ⑭) and tighten screw ② at 25kg-cm.



- 7) Raise the feed dogs by turning the pulley. Adjust differential feed dog teeth ③ so that it will be also flush with the needle plate when the main feed dog teeth is flush with the needle plate (see figure ⑬) and tighten screw ④ at 25kg-cm.

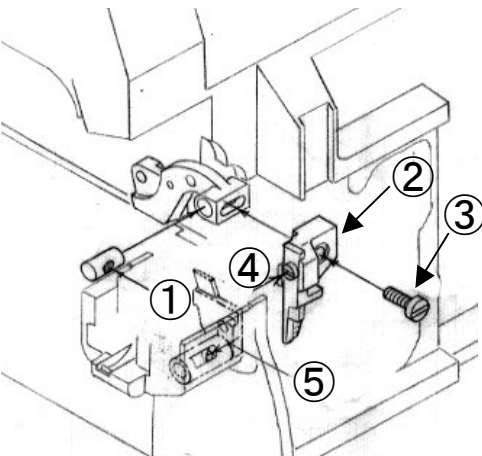
(7) Installing the lower knife holder



- 1) Set spring ① in lower knife holder assembly ② and position them in place. Tighten screw ③.

Set the edge is at the same level of needle plate top surface

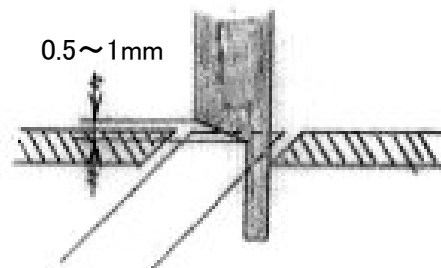
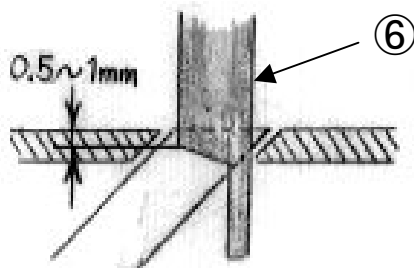
(8) Installing the upper knife clamp



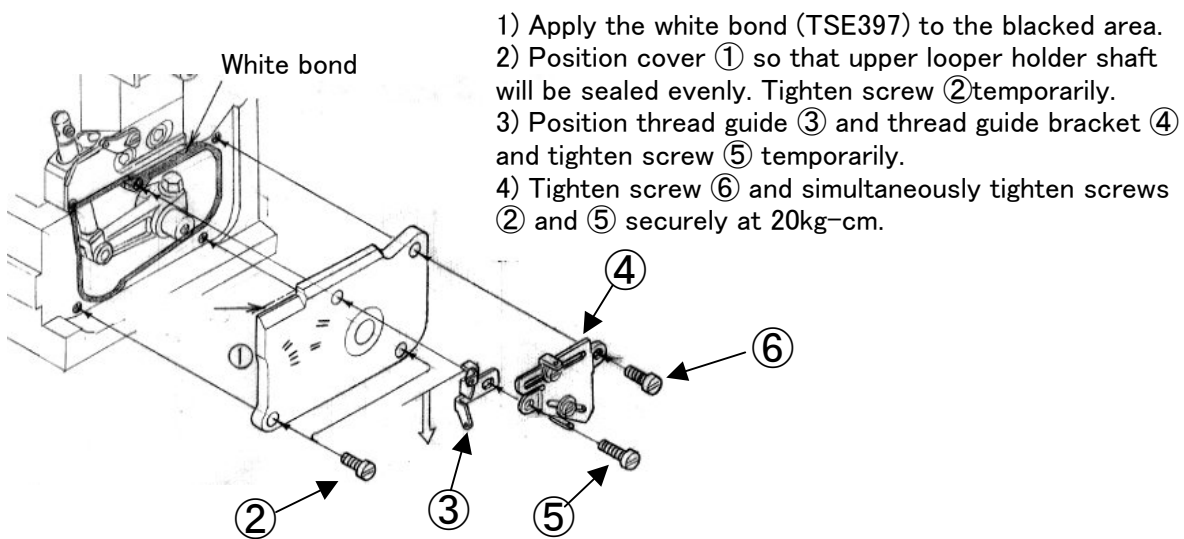
- 1) Position pin ① and upper knife clamp ②. Tighten screw ③ at 25kg-cm.

- 2) Set the upper knife 0.5~1mm lower from the top surface of needle plate when the upper knife is at the bottom of its travel. Tighten screw ④.

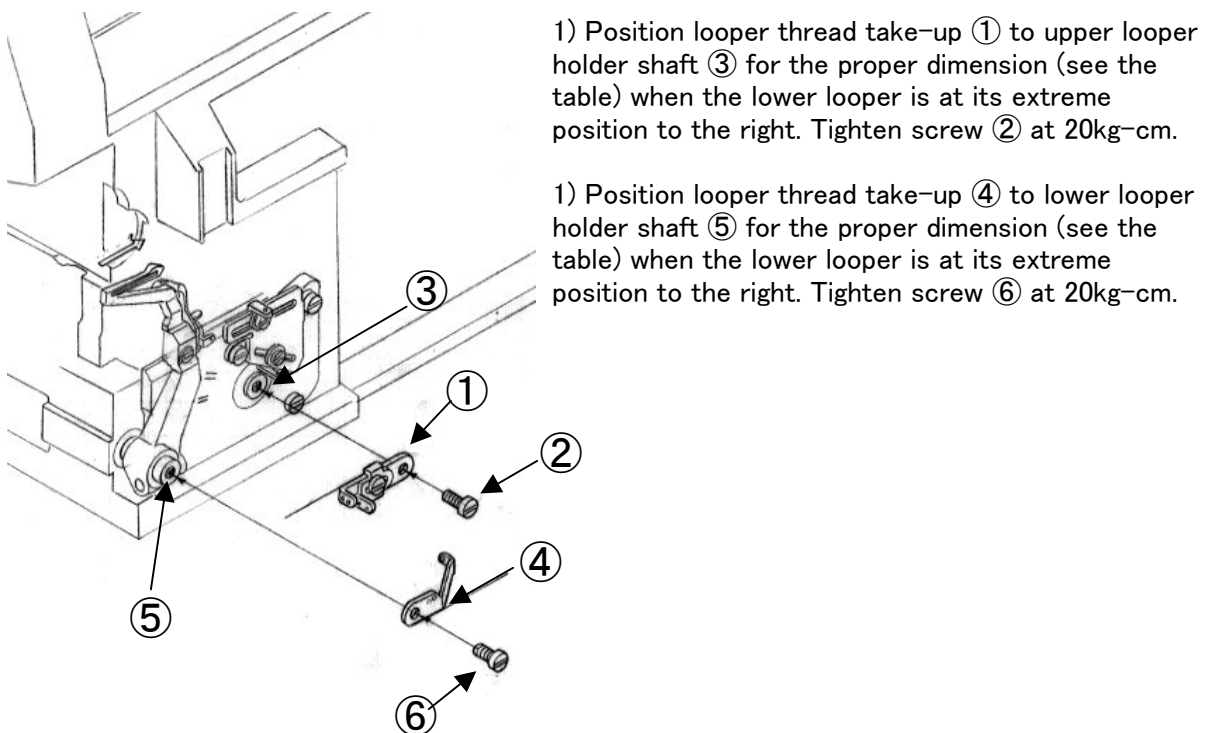
- 3) Set the upper knife 0.5~1mm higher from the top surface of needle plate when the upper knife is at the bottom of its travel. To make the knife presser adjustment loosen screw ⑤ and re-hold the lower knife holder by spring. After all, tighten screw ⑤.



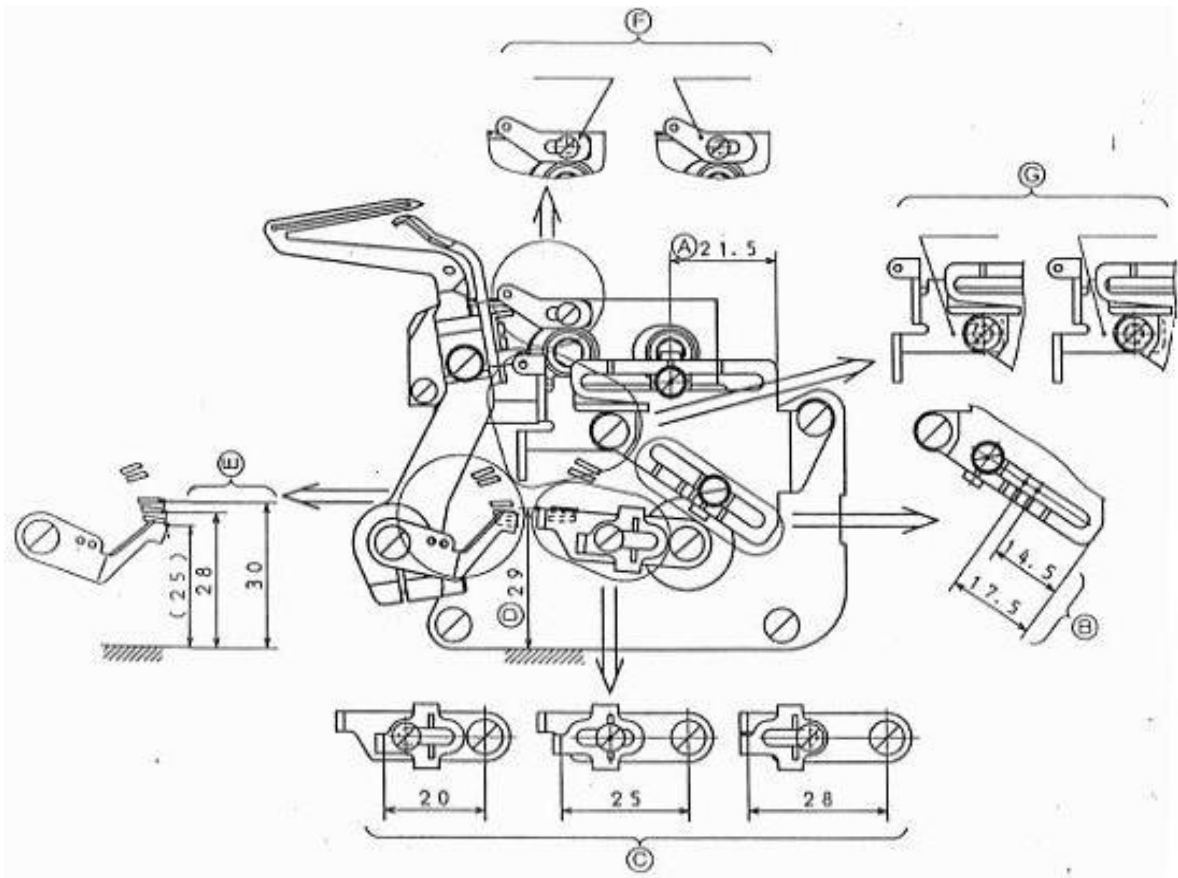
(9) Installing the upper holder cover



(10) Installing the looper thread take-up

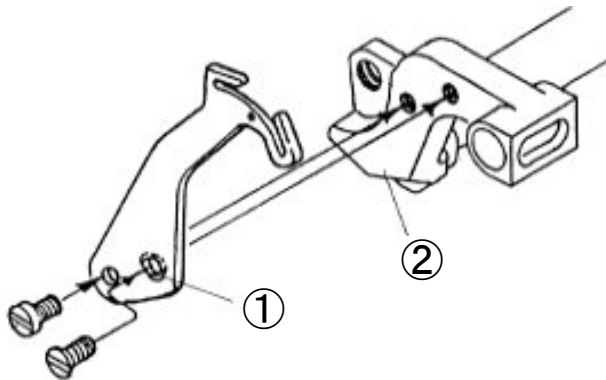


(11) Position the looper thread take-up



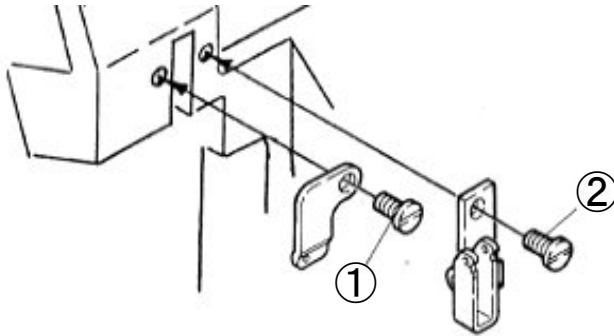
	504 505 514	504	514	504 514	Stitch type
	S	H	H	SH	Looper capacity
A	21.5	21.5	21.5	21.5	
B	14.5	14.5	17.5	17.5	
C	20	28	28	25	
D	29	29	29	29	
E	28	28	25	30	
F	Left	Left	Left	Right	
G	Left	Left	Left	Right	

(12) Installing the needle thread take-up



1) Position needle thread take-up ① to upper knife holder ② for the proper dimension (see the drawing) and tighten screws temporarily.

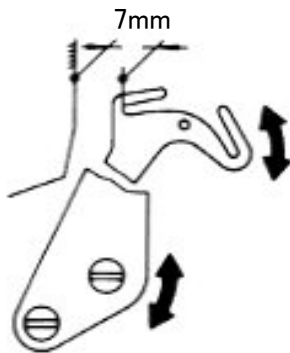
(13) Installing the needle thread guide



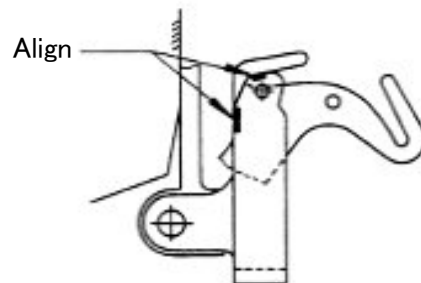
1) Position the needle thread guide and tighten screw ①. Then secure the bracket in place with screw ② at 20kg-cm.

(14) Position the needle thread take-up

1) For 504 stitch

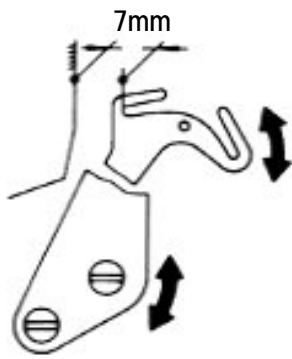


Position the needle thread take-up is 7mm when the needle thread take-up is at its extreme position to the bottom.

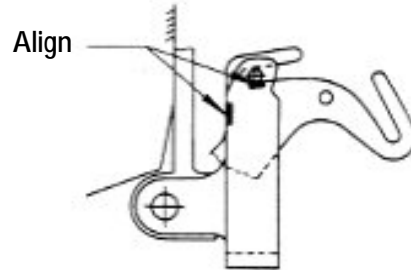


After all, set the needle thread guide following the right view when the needle thread take-up is at its extreme position to the bottom.

2) For 505 stitch

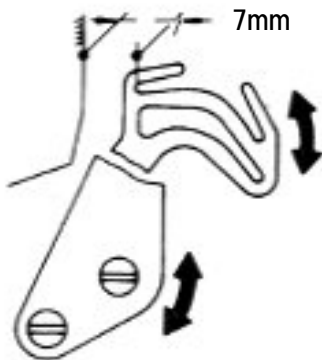


Position the needle thread take-up is 7mm when the needle thread take-up is at its extreme position to the bottom.

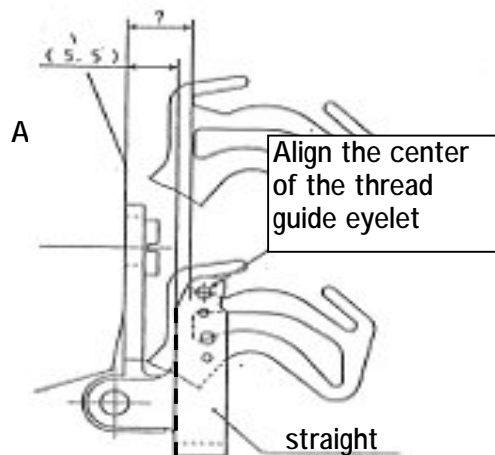


After all, set the needle thread guide following the right view when the needle thread take-up is at its extreme position to the bottom.

3) For 514 stitch (Type: H)

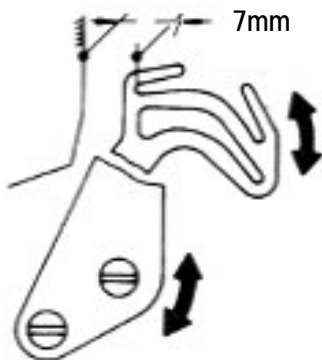


Position the needle thread take-up is 7mm when the needle thread take-up is at its extreme position to the bottom.

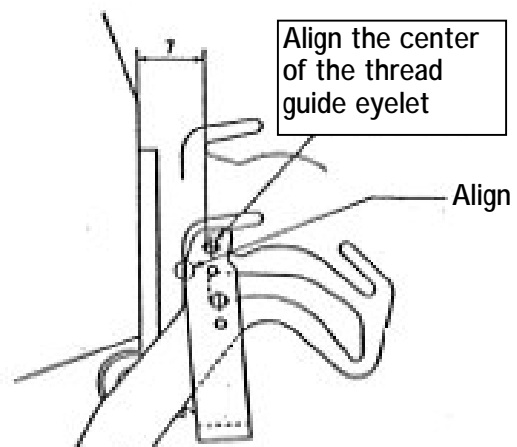


After all, set the needle thread guide following the right view when the needle thread take-up is at its extreme position to the bottom.

4) For 514 stitch (Type: SH)



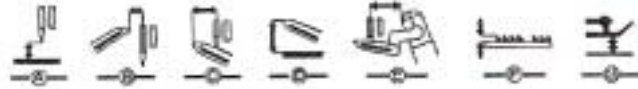
Position the needle thread take-up is 7mm when the needle thread take-up is at its extreme position to the bottom.



After all, set the needle thread guide following the right view when the needle thread take-up is at its extreme position to the bottom.

(15) Table of dimension

EX51



	A	B	C	D	E	F	G
EX5104-02	10.4~10.6	3.7~3.9	4.4~4.7	10.9	16.9	0.7~0.9	5.0
EX5104-04	11.8~12.0	4.1~4.3	4.4~4.7	11.5	15.0	0.9~1.1	7.0
EX5104-52D	10.4~10.6	3.7~3.9	4.4~4.7	10.9	15.1	0.7~0.9	5.5
EX5105-12	10.4~10.6	3.7~3.9	4.4~4.7	10.9	16.9	0.7~0.9	5.5
EX5114-03	10.4~10.6	3.7~3.9	5.4~5.7	10.6	16.1	0.7~0.9	5.5
EX5114-04	11.8~12.0	4.1~4.3	5.4~5.7	11.1	16.1	0.9~1.1	7.0
EX5114-92M2	10.4~10.6	3.7~3.9	4.9~5.2	10.7	17.4	0.7~0.9	5.5

EXT51



	A	B	C	D	E	F	G	H
EXT5104-02	10.4~10.6	3.7~3.9	4.4~4.7	10.9	16.9	0.7~0.9	5.0	5.0
EXT5104-04	11.8~12.0	4.1~4.3	4.4~4.7	11.5	15.0	0.9~1.1	6.0	6.0
EXT5105-12	10.4~10.6	3.7~3.9	4.4~4.7	10.9	16.9	0.7~0.9	5.0	5.0
EXT5114-03	10.4~10.6	3.7~3.9	5.4~5.7	10.6	16.1	0.7~0.9	5.5	5.5
EXT5114-04	11.8~12.0	4.1~4.3	5.4~5.7	11.1	16.1	0.9~1.1	6.0	6.0