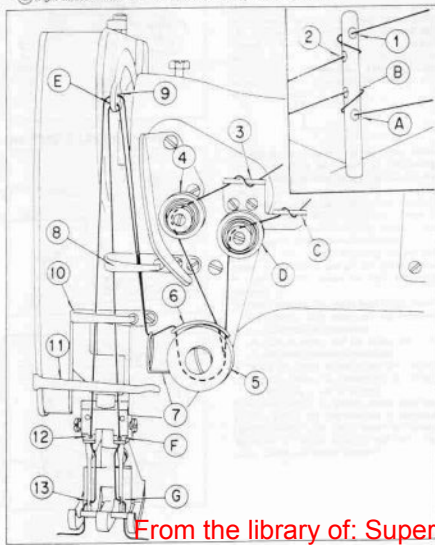


## PASSING THE NEEDLE THREAD

Pass the needle threads in order shown in below.

As you face the machine, left side needle thread should be passed from ① → ⑬ (Left thread tension disc → upper hole of take-up lever → left needle)

The right side needle should be passed, in order, from ① → ② → ③ → ④ → ⑤ → ⑥ → ⑦ → ⑧ (right thread tension disc → lower hole of take-up lever → right needle)

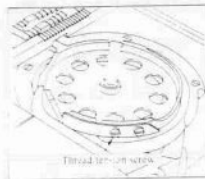


## THREAD TENSION



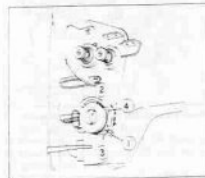
### \*Needle thread tension

The thread tension of the right side needle can be adjusted by the right side thread tension nut ① and the left side needle thread can be adjusted by the left side thread tension nut. Turn the nut to right to make the needle thread tension stronger and to left to make the tension weaker.



### \*Bobbin thread tension

The thread tension of the bobbin thread can be adjusted by turning the thread tension screw of the bobbin case holder. If the screw is tightened, the tension becomes stronger and if it's loosened, the tension becomes weaker.



### \*Thread take-up spring

To adjust the strength of the thread take-up spring, loosen the thread take-up spring shaft screw ②, and turn the thread take-up guide shaft ③ gently toward left. To weaken the tension, rotate it toward right. After the adjustment, tighten the screw ①. To adjust the stroke of the take-up spring, loosen the stopper set screw ④ and move the stopper ⑤ to right and left. If the stopper is moved toward right, the stroke gets bigger.