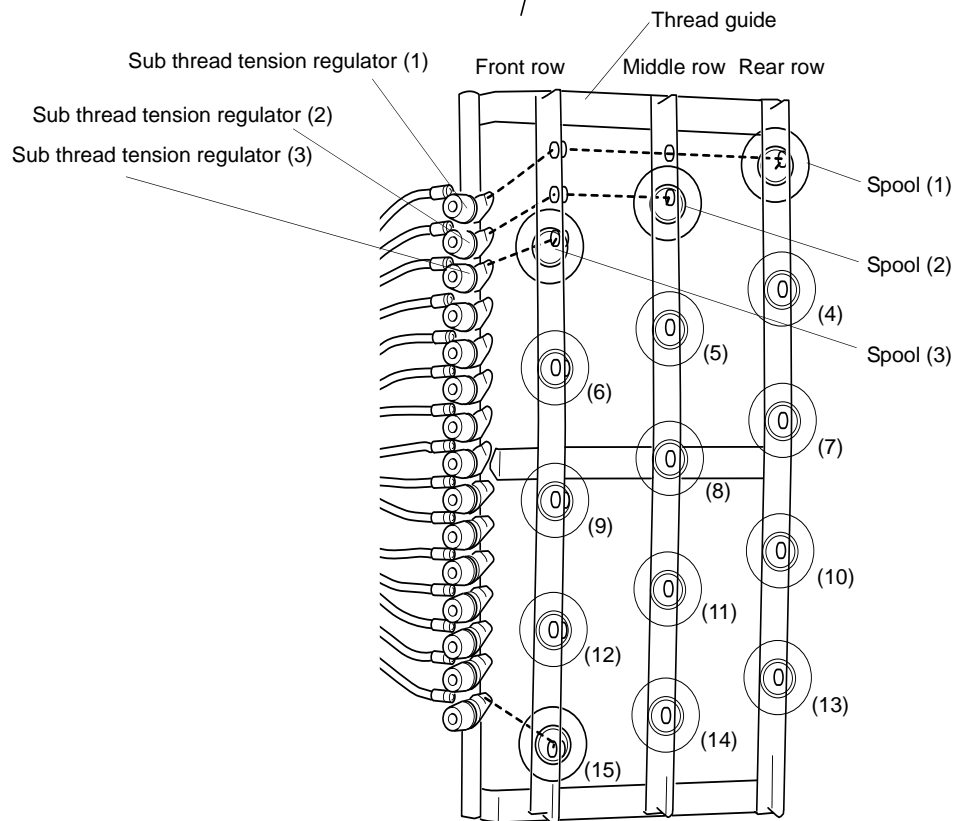
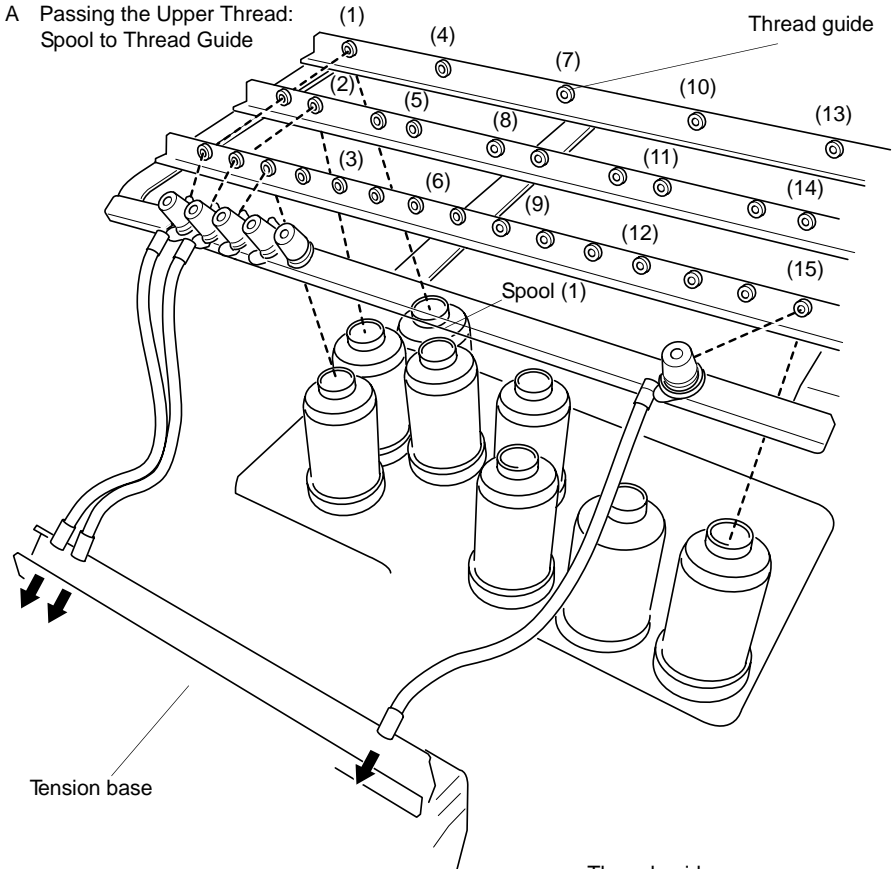


SETTING THE UPPER THREAD

Upper Thread Setting Procedure

1. Pass the thread from the spool (1) through the hole on the thread guide (1) just above the spool (1) and further pass it through thread guides at the middle and front rows.
2. Pass next the thread through the sub thread tension regulator (1).
3. For spools (4), (7), (10) and (13), set the thread in the same manner up to the sub thread tension regulators of the same number.
4. Pass the thread from the spool (2), at the middle row, through the hole on the thread guide (2) just above the spool (2) and further pass it through the thread guide at the front row.
5. Pass the thread through the sub thread tension regulator (2).
6. For spools (5), (8), (11) and (14), set the thread in the same manner up to the sub thread tension regulators of the same number.
7. Pass the thread from the spool (3), at the front row, through the hole on the thread guide (3) just above the spool (3).
8. Pass next the thread directly through the sub thread tension regulator (3).
9. For spools (6), (9), (12) and (15), set the thread in the same manner up to the sub thread tension regulators of the same number.

Fig. A Passing the Upper Thread: Spool to Thread Guide



10. Run the thread from the sub thread tension regulator (15) through the spiral tube (15).
11. Run the thread further through the thread guide (15)-1, thread tension regulator (15) rotary sensor (15) and thread guide (15)-2.
12. Open next the needle bar case cover.
13. Raise the thread holder lever (GL), hook the upper thread on the thread holder (15) from right to bottom and pass the thread through the hole of take-up lever (15) at the top.
14. After that, run the thread down and through the thread guide (15)-3, then through the hole of the needle (15) and finally through the hole in the presser foot (15).
15. Hook next the thread end on the thread holding spring.
16. Set the thread of spools (14) to (1) in the same manner. Finally, push down the thread holder lever (GL) down to finish the setting of upper thread.

Fig. B Passing the Upper Thread:
Thread Guide to Needle

