12. ATTACHING THE NEEDLE

Loosening setscrew ①, insert needle ② fully into the needle bar hole with the long groove of the needle facing towards you, then tighten setscrew ①.

(Note) 1. If the bar-tacking stitches as ② shown above are produced, install the needle so that it slightly faces to the left.
2. Use a SUPER needle for synthetic fiber when sewing with synthetic fiber thread or material.

13. THREADING THE MACHINE

Thread the machine in the order as shown above. Leave thread of approx. 4cm on the needle.

(Note) 1. For a synthetic fiber thread (silicone oil is used), pass the thread also through silicone lubricant thread guide ①.
2. For a thick thread, pass the thread through only one of the two holes in needle bar thread guide ②.

14. REMOVING AND INSTALLING THE BOBBIN CASE

1. Open cylinder arm cap ①.
2. Raise and hold the latch lever of bobbin case ② to take it out. The bobbin in the bobbin case does not fall as far as latch lever ③ is raised and held.
3. To load the bobbin case into the shuttle, fit it onto the shaft of the shuttle and snap in the latch lever of the bobbin case.

15. WINDING A BOBBIN

1. Attach bobbin ① to bobbin winder spindle ②.
2. Thread the winder in the order as illustrated and wind the thread onto the bobbin four or five turns.
3. Push bobbin winder trip latch ③ towards the bobbin (in the arrowed direction), and the winder starts to wind the bobbin. The winder will automatically stop as soon as it has wound a predetermined amount (80% of the capacity of the bobbin) of thread round the bobbin.
4. To adjust the amount of thread wound round the bobbin, loosen nut ④ and screw in adjusting screw ⑤ to decrease the thread amount.
5. If the thread is not wound evenly round the bobbin, loosen screw ⑥ and move bobbin winder base ⑦ in the arrowed direction to make adjustment.

16. THREADING THE BOBBIN CASE

1. Hold bobbin ① in hand so that it spins counterclockwise and set it in bobbin case ②.
2. Pass the thread through slot ③ in the bobbin case. Pull the thread to pass it under the tension spring out to thread exit ④. At this time, confirm that the bobbin spins in the arrowed direction when the thread is pulled.
3. Pass the thread through hole ⑤, and allow the thread to trail about 2.5cm from the hole.