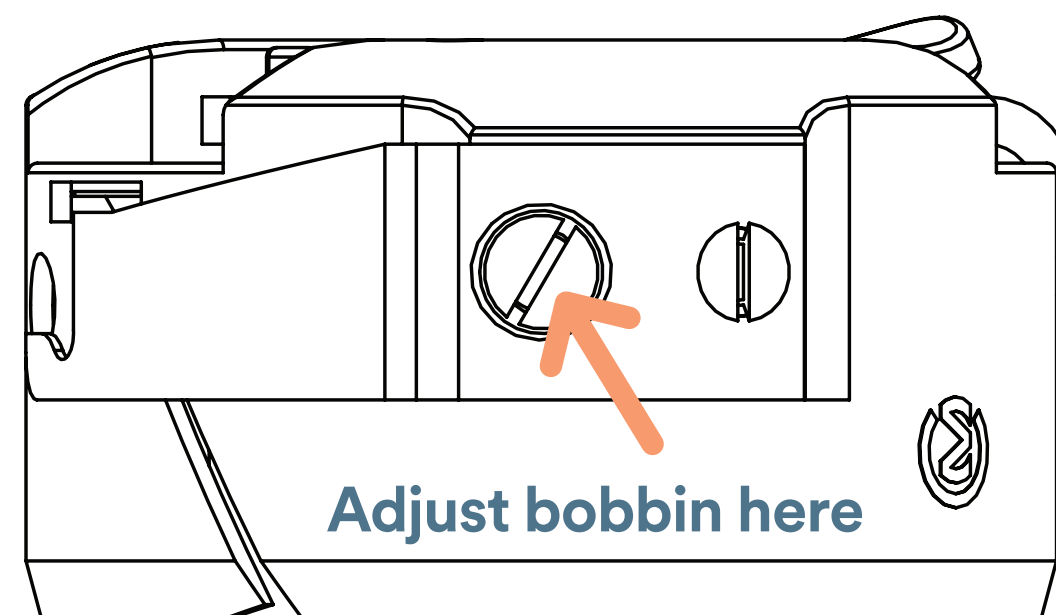


TENSION

ALWAYS ADJUST BOBBIN TENSION FIRST!

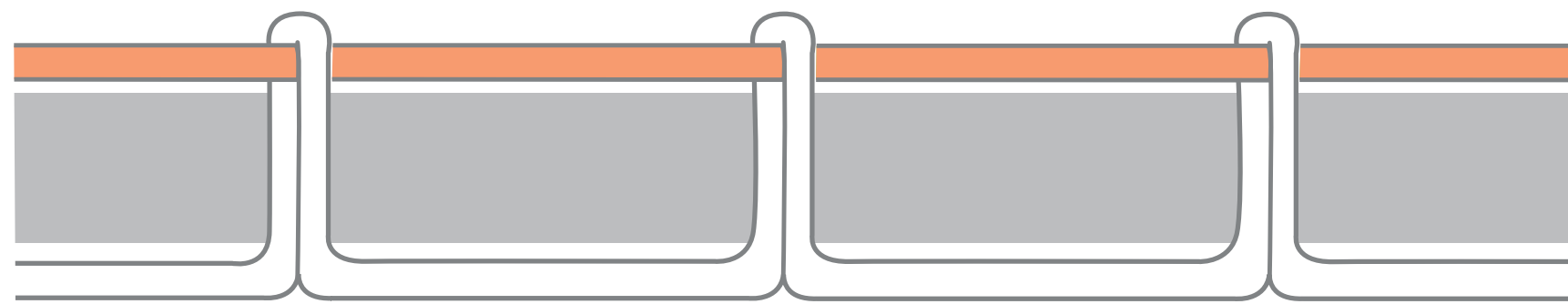
- Bobbin adjustments are minute, like ticks on a clock.
- Top tension adjustments can require full turns on the knob.



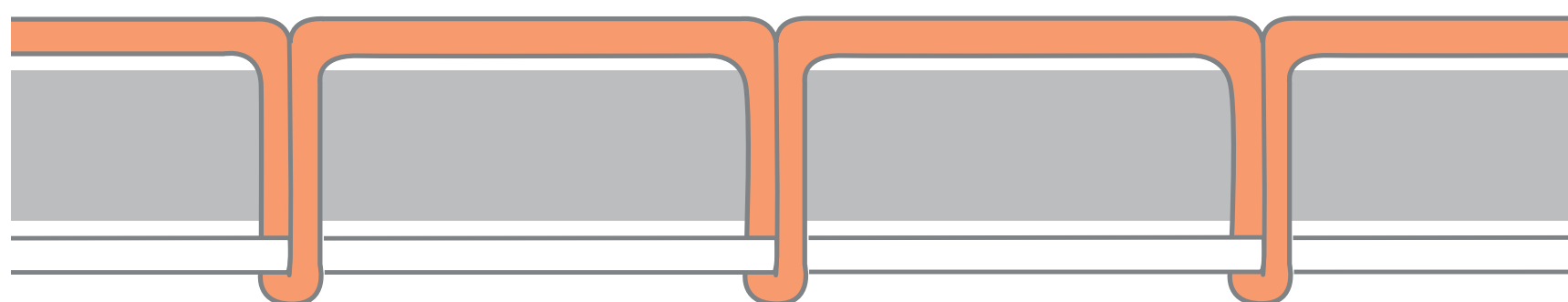
To tighten, turn to right.
To loosen, turn to left.

STITCH TO CHECK TOP TENSION

If top thread looks like this:  Top tension is too **TIGHT**.

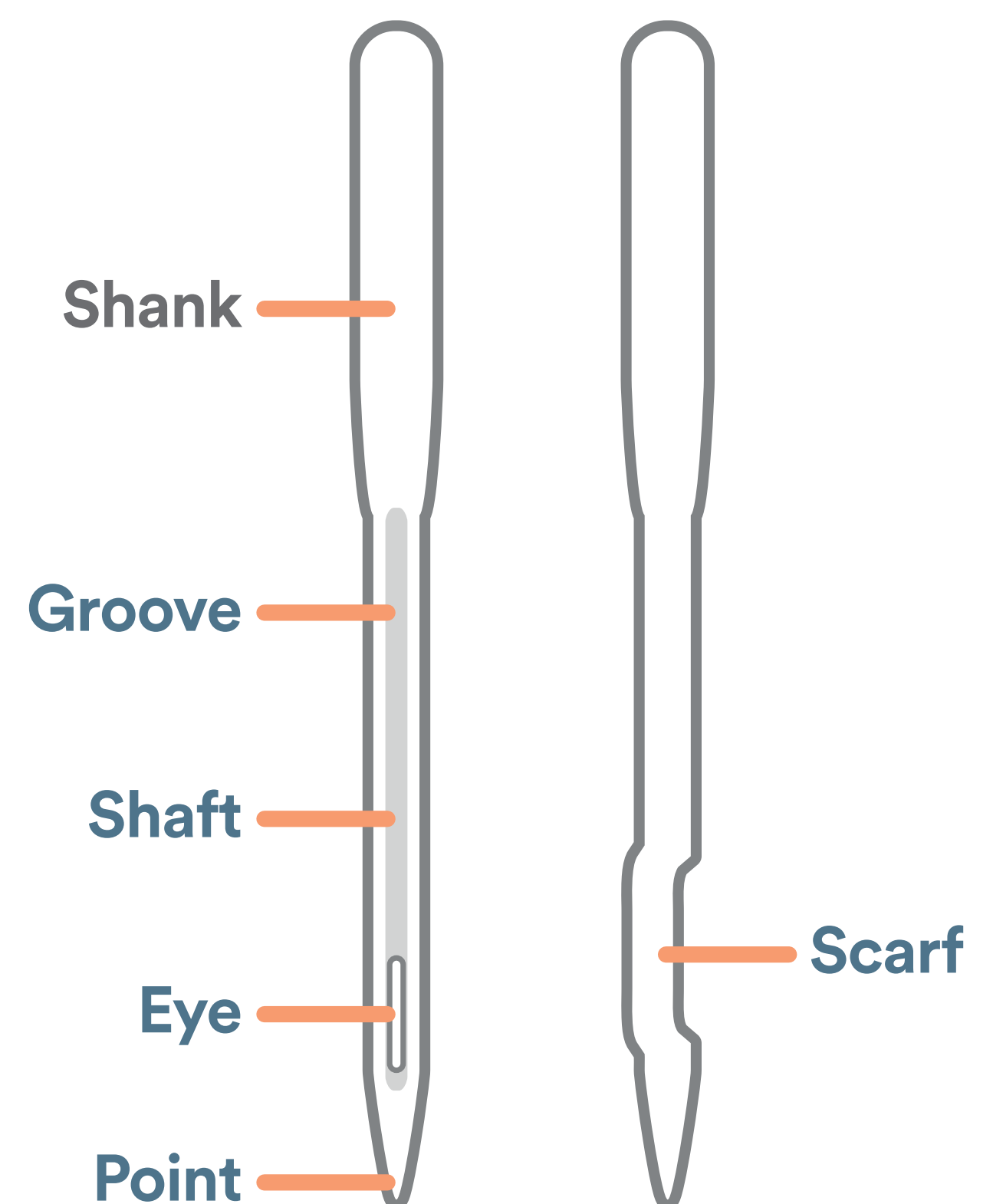


If top thread looks like this:  Top tension is too **LOOSE**.



NEEDLES

FRONT SIDE



THREAD

| NEEDLE SIZE | THREADS |
|-------------|---|
| 12 (80) | Silk (100 wt.) 60 wt., monofilament, mylar, cotton, poly |
| 14 (90) | Silk (100 wt.) 60 wt., monofilament, mylar, cotton, poly |
| 16 (100) | 60 wt., 50 wt., 40 wt., monofilament, mylar, metallic, cotton, poly |
| 18 (110) | 50 wt., 40 wt., 30 wt., metallic, cotton, poly |
| 20 (120) | 30 wt., 20 wt., 12 wt., cotton, poly |