

## TENSION

### 1 Always adjust bobbin tension first!

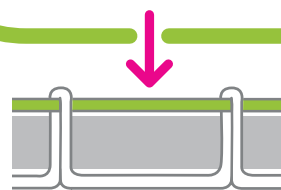


Bobbin adjustments are minute, like ticks on a clock.

Top tension adjustments can require full turns on the knob.

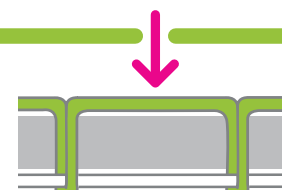
### 2 Stitch to check top tension

If top thread looks like this:



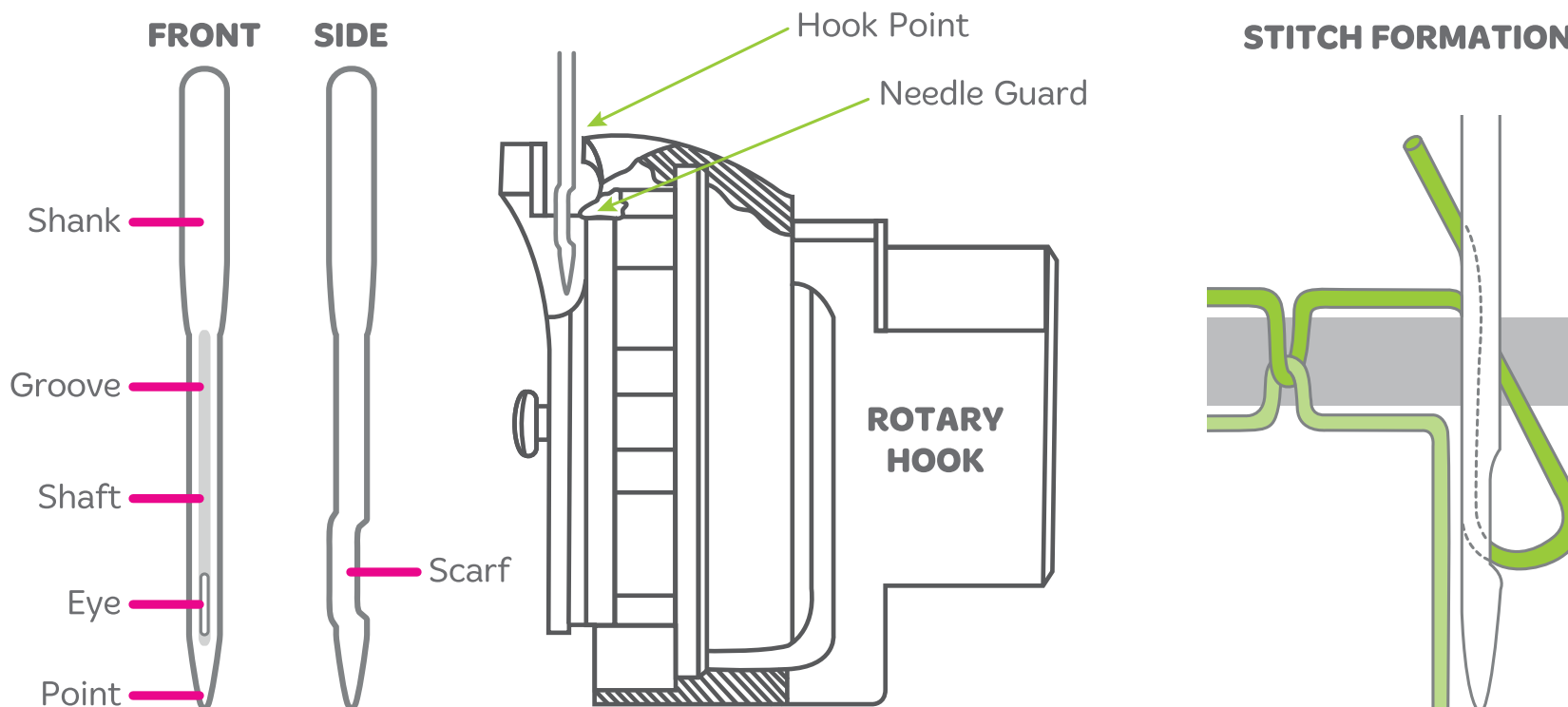
Top tension is too **TIGHT**.

If top thread looks like this:



Top tension is too **LOOSE**.

## NEEDLES



## 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                                |