

# LACE FLYER KIT

The Lace Flyer for the Starling V3/V3FP can only be used in Scotch Tension. **Please do not use this flyer in Irish Tension under any circumstance, not even for rewinding.**

The Lace Flyer has a 6 mm orifice and comes with 3 lace bobbins, 2 rear bearings, and an adapter for the Maiden Cup, which allows it to hold the smaller Maiden Bearing of this flyer. This flyer uses the same drive belt, tension belt, and hook tool as the Standard Flyer. It also comes with an Ultra Light Tension Kit which provides the lightest tension possible for this flyer.

Setting up the Lace Flyer is similar to the Standard flyer except for the adapter that is placed into the Maiden Cup before installing the flyer. Simply place the adapter into the Maiden Cup and press down to ensure it is fully seated, then install your Lace Flyer like you would the Standard Flyer.



Maiden Cup Adapter

## Tension

The Lace Flyer can use the same tension belt you use for your Standard Flyer, especially for high take up plying jobs. You also have in your spares kit 1mm kevlar, a cinch, and some elastic bands that can be used to create an Ultra Light Tension Belt. This would be ideal for ultra light gossamer/cobweb/embroidery thread sized gauges.

### Standard Tension Belt (A)

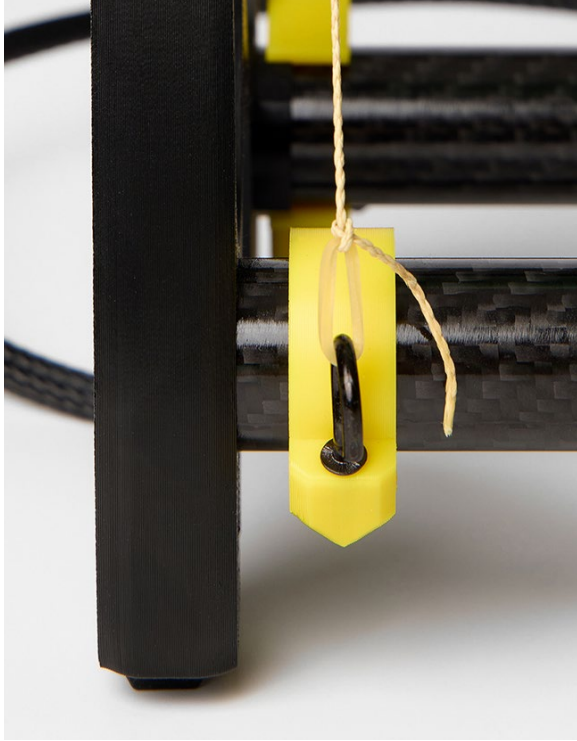
For optimal performance, before beginning any spin, you'll want to adjust the Right Tension Dial to the middle of its adjustment range, making sure there's no slack in the tension belt and little to no expansion of its spring. This way, there is a usable range on the dial for tweaking the expansion and/or contraction of the spring and by correlation, the tension, as you spin and fill the bobbin.

Next, remove the slack on the tension belt by rotating the Left Tension Hook outward until the slack is gone, then use the Right Tension Dial to fine-tune from there (no need to mess with the cinch plate unless you want to). We recommend minimal dial adjustment of no more than half a rotation of the knob at a time. The spring serves as your visual tensioning cue. Its usable range goes from collapsed to fully extended at almost double its length. With the spring collapsed, the wheel will have very little take up, but not as light or as easily adjustable as the Ultra Light Tension Belt.



### Ultra Light Tension Belt (B)

When setting the Ultra Light Tension belt for the lightest take up, you'll want the elastic to be shaped like a 0 (elliptical) but not stretched. Before spinning, get to know your tension by using your bobbin leader to get a feel for your take up. Make macro adjustments first by rotating the left side with the elastic first. Then, if micro adjustments are needed, you can use the tension dial on the right side.



## Speed

When getting to know your Lace Flyer, we recommend starting slow with a slower percent on your speed controller and using the small whorl on the motor pinion. As you feel comfortable with the set up, increase the speed as needed. If you get to 100% speed and still need more, move your drive belt to the larger high-speed motor whorl. With higher speeds, consider setting higher start/stop delays in the controller.

## Wheel Balance

Due to the nature of high speeds, your wheel should be balanced as well as possible. The Starling has an advanced vibration-dampening system, but in the case of excessive vibes, here are some things to try.

- Make sure that all four feet are level with the surface on which you are spinning
- Have one guide on each arm of the flyer
- At the higher-end speeds, you will want to keep both guides in the same part of the flyer arm, keeping them both even as you adjust them
- Some owners report using a tea towel or contact paper to help

