Majacraft Aura Mechanics

Description of Aura Tensioning

How to use the tensioning system on your new Majacraft Aura.

Because this wheel has a different tensioning system with a huge amount of options, it requires a rethink about how to tension for spinning. There are two words that will help it all make sense: Strength and Speed.

Strength refers to the “Strength of the Pull”
Speed refers to the “Speed of the Pull”

Strength

The Strength of the Pull is determined by the tension adjust knob on the side of the head. If the tension adjust is screwed right out and the Bobbin Drive band is loose, the pull is very weak. If the tension adjust is screwed in and the bobbin drive band is tight, the pull is very strong and quite simply ‘there ain’t no way you are going to stop it’.

A **strong pull** is needed when making a yarn that is very shaggy (boa-like tailspun), has big add-in’s or any other high-drag texture. The strong pull will tug these elements around corners and through guides so you don’t need to hand-wind the bobbin. At the same time, if your speed is slow, it allows you to get enough twist to keep it all together. A strong pull will also produce a very even amount of twist because it is not possible to ‘hold it back’ to introduce more twist without potentially breaking the yarn.

A **weak pull** is good for yarns or sections in your yarn when there is very little texture to give resistance or drag. It is also best for if you want to introduce more twist to your yarn or if you are trying to spin a very fine yarn.

Speed

The Speed of the Pull is determined by the difference in size between the groove the Bobbin Drive band is in and the groove the Flyer Drive band is in. If they are very similar size then the yarn will pull in slowly. If they are very different then the yarn will pull in fast. The final element is how full the bobbin is, a full bobbin will pull yarn in much faster than an empty bobbin. As you spin you may need to screw the tension screw out a little to stop the yarn pulling in at the speed it is capable of.

From here you can think about what you would like to achieve as the Aura will allow you to produce similar effects in different ways.

A **fast pull** is handy when making extreme novelty yarns that need little twist or have sections that don’t, or when spinning long fibres that may not need a lot of twist, such as silk.

A **slow pull** comes in handy when “building a yarn”, such as when you stop, add things in, or create a specific effect in an isolated spot and you need time to do it without the yarn getting yanked out of your hand. Slow pull is also good for light and fluffy yarns such as mohair or boucle where you want to spin slow and create textures as well as add twist. Lace-weight yarns require a slow pull too (also a weak pull so that lots of twist can be added)..

Mix and Match!

The best way to open the creative doorways with this wheel is to experiment. Try a strong-pull with a slow speed, for example, and be amazed at the super chunky shaggy yarns that it will make with ease! Want a super thin silk yarn with beads? Try a fast pull with medium-soft strength. The possibilities are endless! All it takes is a little bit of experimenting to find the proper combination to suit your specific fibres and ideas.

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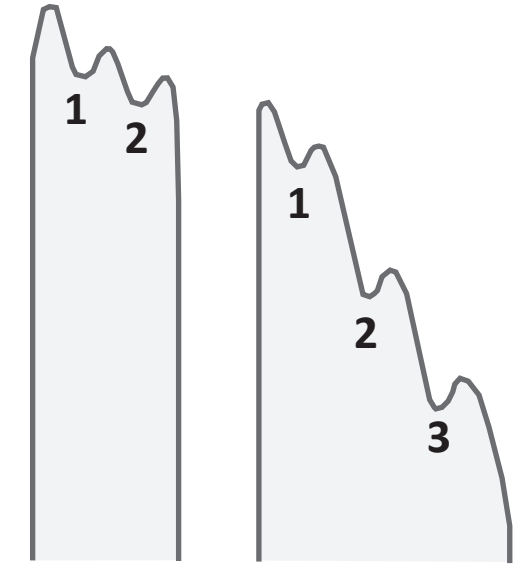
Drive Band Key



Examples

Sport weight yarn

Strength=MEDIUM (50% tension on Tension Adjust)
Speed=SLOW (Bobbin Drive groove 1, Flyer Drive groove 1)
The yarn will draw in fairly slowly with a medium pull. The spinning is slow, not too strong and very relaxing.

Lace weight yarn

Strength=WEAK (25% tension on Tension Adjust)
Speed=FAST (Bobbin Drive groove 1, Flyer Drive groove 2)
The yarn will draw in quickly but because of WEAK pull, lots of twist can be added and the pull is gentle.

Bulky yarn

Strength=STRONG (100% tension on Tension Adjust)
Speed=SLOW (Bobbin Drive groove 2, Flyer Drive groove 1)
The yarn will draw in very slowly. The pull is strong and even so the bulky yarn will be drawn in easily and a very even twist will be put in the yarn..

How to Adjust Aura Bobbin Drive band

Remove the green Flyer Drive belt if it is on. It is assumed that the Bobbin Drive band is on

Turn the tension adjust knob at the side of the spinning head Adjust Block until it is at the mid-point of its movement. The extremes being the adjuster screw right in (Adjust Block fully open) and the Adjust Block sitting hard against the spinning head (fully closed)

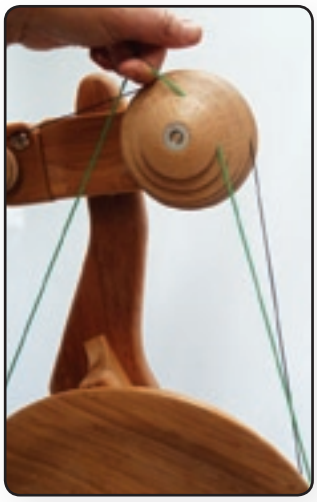
Slightly loosen the JCB bolt that secures the head to the handle using your 4mm allen T wrench.

Now slide the head (up or down until the Bobbin Drive band is firm but not too tight. When the head is tightened, it will straighten up and put more tension on the Bobbin Drive band. This is why it is not necessary to make the bobbin drive super tight.

Now tighten the JCB bolt holding the head on.

The Bobbin drive band should be quite tight now. You can screw the tension adjust knob out a bit to release the tension. When set like this, when the Adjust Block is fully closed, the Bobbin Drive belt should be very loose which equates to lots of slip on the Bobbin Drive (0% drive). When the adjuster screw is tightened to about half way through its movement, the Bobbin Drive belt should be quite tight which equates to 100% drive on the bobbin

Replace the green Flyer Drive belt on to the groove that is most suitable for your purpose.



Now you can turn the tension adjust knob inward or outward to create the strength of pull that you require.

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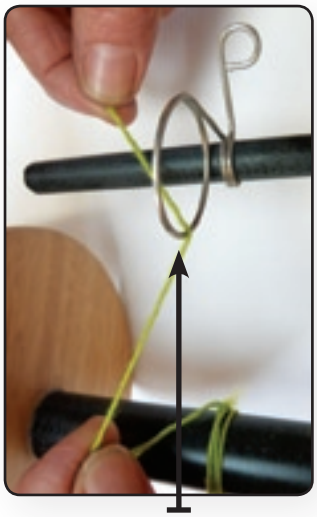
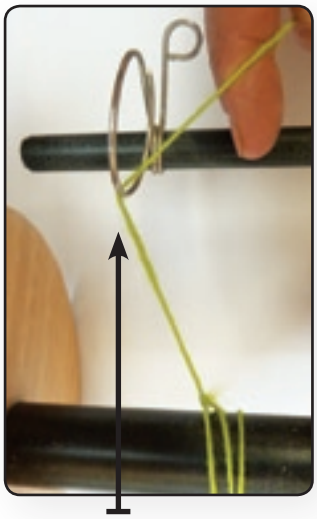
How to Thread the Aura Flyer



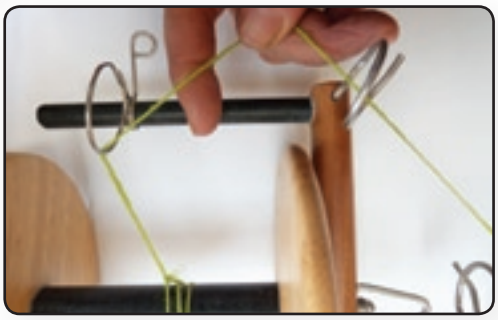
INCORRECT

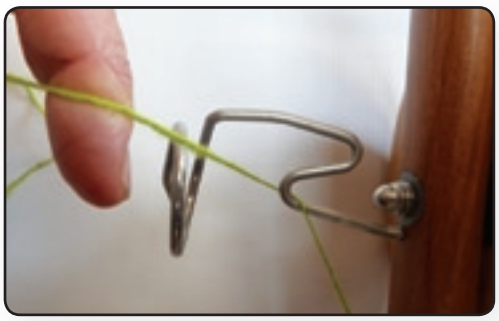


CORRECT

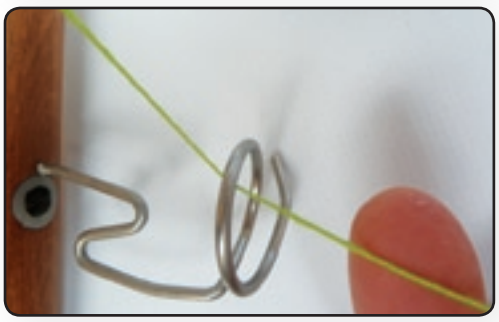
Pass the yarn through the large flyer hook on the flyer arm. The yarn goes in the ring from the flyer head side and out toward the orifice end of the flyer.

Thread the yarn through the ring on the end of the flyer bar. You can either push it straight through the ring or alternatively slip it through the pigtail.



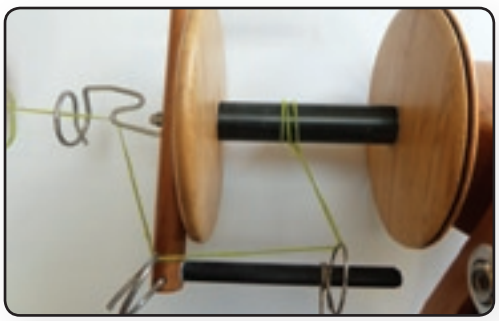


If you are spinning fine yarn then take the yarn over the orifice close to the flyer bar, so it sits in the 'V' (delta) shaped angle, underneath, up between the 'V'. The delta is designed to hold the yarn still when spinning finer yarns.



If you are spinning a very large yarn then bypass the delta and go straight through the halo.

Now you can thread the yarn through the large halo ring.



And now the Aura flyer has been threaded

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