

# self-service HOW TO...

## PART TWO

# ADD A CRINGLE TO YOUR SAIL

This month our resident DIY maestro, **Marjan Tkavc**, shows us how to wield a knife and disposable lighter to sort out a tiny downhaul pulley that won't let you loop-loop-go...

Part from the rush I get with the anticipation of a good session and the adrenaline hit that inevitably follows, there's another type of rush associated with my windsurfing – especially with afternoon sailing. I follow the forecast, check on the wind before I rush out of the office, then rush to the coast, rush to get into my wetsuit, rush with rigging... It's all rush, rush, rush – and all because of the fear that the wind will die before I get to the water and make a few runs. It's happened to me a few times, and I'm sure it's happened to you, too. The bottom line is that every minute counts, and none more so than the last ones when rigging. This is quite unique to the sport of windsurfing. Can you imagine arriving at a ski resort with a reported snow cover of 50cm, only to find green pastures and the resident comedian telling you that the snow melted half an hour ago?

This is why I was so appreciative when NeilPryde introduced mast extensions with a loop-loop-go feature a decade or so ago. Instead of meticulously threading your downhaul rope through all the pulleys you just pulled a loop of rope through the tack eyelet, attached it to the extension roller and pulled on the rope end to downhaul the sail. Joy!

Then came the Power XT extension from North Sails, which ultimately simplified rigging. You just loop the rope and ratchet it taut, with no hand pulling necessary.

The Power XT is really nice, easy, and super-fast, but then along came some new sails which I bought a couple of seasons ago. To my great surprise they didn't work with the Power XT extensions as there wasn't enough space above the pulley rollers to thread a loop of rope through. The only way to use the Power XT with these sails was to thread the rope the old-fashioned way, but by so doing I lost almost half of the advantage.

To solve the problem I did some brainstorming on changing the pulley into a cringle. And, as you'll see, the basic solution is quite simple, and involves attaching a ring to the pulley.

The key is to make this rope connection as tight as possible so there's minimum play, thereby avoiding rope damage and ensuring minimal luff extension. To achieve this I used a special sailing ring (a bow shackle) and a special rope knot (a connecting knot). Some other knots may be used as well, depending on your knot tying skills.

We have been using this solution in Slovenia for three seasons now and it works perfectly. The rope is in excellent condition (see picture) and the play is minimal. The only downside is that luff is approximately 3cm longer, which is accommodated by the mast extension.



### TOOLS REQUIRED

5mm bow shackle, downhaul rope, plus a knife and lighter to seal the rope.



STEP ONE

Thread the rope around all rollers in the pulley.



STEP TWO

Make the connecting knot with both ends of the rope. In this picture the knot is well away from the pulley for demonstration purposes. Make the knot as close to the pulley as possible, so close that...



STEP THREE

...you can just manage to push the pin of the shackle through. This is not that easy to do, but after a bit of practice it shouldn't be too much trouble. Doing it this way means that the play of the new cringle is minimal.



STEP FOUR

When satisfied with tightness of the rope, pull out the pin – but be careful that the rope stays in the same position, so that you just add the shackle and push the pin back in and then screw it into the shackle. Cut the excess rope and seal it with a lighter.

### HOW TO MAKE A CONNECTING KNOT

The connecting knot is used to connect two pieces of ropes together. This is the best way to extend a rope.



#1

Lay the rope ends side by side.



#2

Make an ordinary overhand knot on the first end. Leave it loose.



#3

Thread the second end through the knot.



#4

Make another overhand knot on the second rope, but around the first rope.



#5

Tighten both knots and pull on the ropes so that the knots get closer together in order to achieve...



#6

...an indestructible rope connection.

### COMING SOON...

How to fix a broken carbon mast... How to make nose protector that really works... How to fix a quiverbag on a car painlessly... How to extend a mast...



### THE AUTHOR

Marjan Tkavc hails from Slovenia, where people ski the Alps in the morning and windsurf the Adriatic in the afternoon. He started windsurfing 15 years ago after his wife (a former racer) thoughtfully taught him on a sinker. Marjan caught the DIY bug at just 14, and found himself taking on increasingly ambitious projects, but insists that there is no connection to his professional life as a nuclear expert. His DIY credo is: "Simple solutions can solve big problems and everyone can do it". In his spare time he runs [mthslovenia.net](http://mthslovenia.net), just in case you find yourself in Slovenia on a no wind day... ☺