

Setting Up the Mast, Parts I and II

Martin 'Stavros' Payne · BDA Magazine 2007 Annual, pp. 20, 22

Summary. Two short Technical Tips on the mast ram. Part One shows how to check that the ram is not bending or inverting the mast when it is fully aft: with rake set to 122 cm by the black-band method and runners and backstay released, pull the ram aft, take out the turnbuckle pin, let the mast settle and adjust the turnbuckle until the pin goes back in freely. Part Two explains marking the ram rope at 1, 1.5 and 2 cm forward so that pre-bend can be set repeatably upwind, to flatten the mainsail and de-power in heavy air or open the top of the main in light air.

Part One

Setting up the mast is extremely important.

1. Once you have checked the rake (with the standard black band method, 122 cm), release runners and backstay and lift the boom out of its support.
2. Pull the mast ram all the way aft and secure it in the cleat.
3. Take the pin (at the mast) out of the mast ram turnbuckle.
4. Then give the mast a shake, so that it is positioned where it naturally wants to sit.
5. Offer the mast ram turnbuckle back to the mast to see if the hole aligns exactly. If it does, great!
6. If not, release the two small holding nuts and turn the centre thread until the pin can be returned with ease.
7. Then secure the two nuts again and tape up to be sure they stay.

You now know that your mast is not being influenced by the ram when it is in the aft position (i.e. not inverting or pre-bending).

A straight mast is a fast mast.

It will also give you your maximum forward range when you are on the downwind leg.

Part Two

Being able to flatten the mainsail with ease is essential and can easily be accomplished by use of the mast ram. This can help to de-power in heavy winds and open the top of the mainsail in light winds to give better speed.

To be exact with the amount of mast ram used on each occasion, follow these steps:

1. Starting with the mast in its furthest aft position, make a clear mark on the mast ram rope.
2. Then go to the mast with a marker pen and measure 1 cm, 1.5 cm and 2 cm forward, marking the rope carefully as you ease the mast ram to all three positions.

You are now able to adjust the mast while sailing upwind, and know exactly how much pre-bend you are using.

Different mainsails require different amounts of adjustment. Once you have found good speed and can manage the amount of weather helm and heel of the boat, make a mental note of the mast ram markings so that you can always reproduce them.

— *Martin 'Stavros' Payne*

Originally published as "Technical Tips 12 & 13 – Setting up the mast" in the BDA Magazine 2007 Annual. © Martin Payne and the British Dragon Association. Reproduced with permission. Transcribed for the Peticrows Dragon Archive (petticrows.com).