

Mast Set-up

Martin 'Stavros' Payne · BDA Magazine 2004 Annual, p. 13

Summary. The first Technical Tip sets out the basic mast checks for a Dragon. Leave the mast step where it is unless you are slow, then try only one hole aft for a light helm or one forward for too much weather helm; with the mast at rest, adjust the ram bottle screw so the ram cleated aft neither inverts nor pre-bends the mast. Set rake at 122 cm from the top of the black band, with 123 cm for windy and 121 cm for light conditions. Mark the ram rope at 1 cm, 1.5 cm and 2 cm of forward mast movement so that pre-bend can be applied repeatably to de-power upwind or to open the top of the main in very light air.

THE THREE MOST important concerns for house buying are, the Site, the Site and the Site.

When I first met Poul-Richard, he told me a similar thing with Dragons, the Mast, the Mast and the Mast. The Mast has to be right or everything else goes pear-shaped.

Most of you already have the correct mast step position, so DON'T move it.

Some, and I mean only some, could try ONE hole back or one forward. If you have a very light helm try moving mast back, if too much weather helm, try moving it forward. Only move the mast if you think you are slow! Please realise these guidelines are only experimental ideas.

Next, make sure the mast at rest, i.e. no runners, no backstay, no ram, boom out of crutch support etc, is sitting where it wants to be. Give it a shake. Then offer the mast ram to the mast and the pin should go in without forcing the mast aft or forward. If it does fine, if not, adjust bottle screw until it does, so that with the ram cleated aft the mast is not forced to be inverted or pre-bent. Now we can get the maximum power and also de-power the mast at the appropriate times.

Check the rake, 122 cm from top of Black Band. Try 123 cm if windy or 121 cm if light. Then tape up the remaining holes and just experiment with those three settings.

Next, mark middle of mast at deck, then measure 1 cm and 2 cm forward. Pull the mast ram slowly forward until mast centre mark is in line with 1 cm mark on deck, then marker pen your mast ram rope.

Continue forward until midway between 1 cm and 2 cm mark, then make two pen marks on rope, one big one small (means 1 & half cms). Lastly go the whole 2 cm and make two big marks on your rope with your permanent marker pen.

You are now able to de-power your mast during the upwind legs, knowing exactly how much pre-bend you are using. For example, if you are overpowered, put on 1 cm of pre-bend, or more if you can still not keep boat upright.

With the three settings you are able to reproduce the pre-bend on each beat, but more importantly make a note at the end of the race of what was good. This can also work in very light conditions to help open the top of your mainsail and flatten out the lower part.

Higher, Faster, Longer

— *Stavros*

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