

405 TUNING GUIDE.

TUNING IS KEY TO PERFORMANCE – P&B TUNING GUIDES ARE CREATED, TRIED AND TESTED BY OUR SAILORS AND BRAND AMBASSADORS.

Settings used by Simon Marks 1998 405 National Champion. (Total crew weight 115kg).

One of the most important controls for masts bend and stiffens is the spreader. The measurements will not be correct if your crew's weight differs a lot from mine. If you are lighter than around 115 kg, you should be looking at sweeping your spreaders more and shorting them a bit. If you are much heavier than 115 kg, you should be, lengthening them and bringing them forward more.

On the 405 there are three other main mast controls presented in **TABLE 1**.

TABLE 1

WIND STRENGTH (MPH)	RAKE (CM)	RIG TENSION (KG)	MAST RAM
Light 0-5	590	91	Slack
Light – Medium 5-10	590	113	On a bit but mast not quite on straight
Light – Medium 10-15	590	113	On hard mast straight
Medium – Heavy 15-20	580	120	On hard mast straight
Heavy 20+	581	135	Off but still holding

These settings will vary with your weight – the definition of Heavy and Medium to Heavy will change a lot with your own total crew weight, the rest should remain the same.

Use **TABLE 2** as a guide on how to use the basic controls on your 405 to create as much speed as possible.

TABLE 2

WIND STRENGTH	KICKER	OUTHHAUL	CUNNINGHAM
Light	Slack. Holding boom down on tracks.	Ease until creases just disappear	Off
Medium	Control leach using mainsheet tension. When overpowered and easing the main pull on kicker to control leach	Ease outhaul 2" from max	Pull on two inches
Heavy	On but leach open to spill wind	Pull on until crease shows	On hard to de-power

CROSS SECTION VIEW OF MAST + SPREADERS



Take measurement **A** by intersecting a line between spreader ends with a perpendicular line from the mast track. Measurement **B** is taken from the side wall of the mast section to the spreader end.

A = 175mm

B = 700mm

OTHER ESSENTIAL TIPS FOR THE 405:

The 405 must always be sailed up right 100% of the time. The boat will sail much faster and will make a huge difference to your position.

In the light wind when the spinnaker is not able to fly, the crew should be on the foredeck goose winging the jib. The helmsman should be next to the shroud so that the stern is out of the water.

The angles to sail down wind with the asymmetric spinnaker will vary a lot, if you think that there is enough wind to plane down wind just do it. In the light stuff when you sail as low as possible ease the spinnaker halyard about a foot to a foot and half. This will add fullness to the sail and power it up. You should also sail it leant to windward so that the spinnaker falls away from the rig so it is not being covered by the main and jib. This is very unstable in waves but if you get it right it really pays off.