

MIRROR TUNING GUIDE.

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

MAST RAKE: Bermudan

All measurements for rake are taken from the top of the mast to the top of transom. First pull a tape to 4200mm (4.2m) measuring to the top of the gooseneck's black band giving datum point; now measure to top of transom to gain a rake measurement. This ensures a constant top of mast point, transferable from boat to boat.

The chart is for Winder boats, Goodwin / Wooden hulls require slightly more rake.

- Wooden Hulls 4995-4920mm.
- Winder Hulls 5020mm.

To increase the rake move the shrouds down a hole in the chain plates (which gives a smaller number because the mast is raked backwards and the mast top is closer to the transom). To decrease rake move the shrouds up a hole in the side chain plates (this gives a bigger number). When overpowered rake back half a hole to 5010mm and Tension to (18 a Loos gauge).

RIG TENSION

Using a Loos tension gauge the reading is taken on the shrouds a good guide is to increase tension as the wind increases to avoid jig luff sag. Start with 15 on the gauge with a max of 18.

FAIRLEADS

The fairleads should be positioned as far back as possible on the thwart and as high as possible. Bearing point between fairleads 750mm.

- Bow to bearing point of fairlead 997mm (taken to outside edge of the middle of the bow.)
- Tack of the jib should be raised or lowered according to wind conditions use the top of the gun haul as a datum point.

SPINNAKER POLE HEIGHT

- Bow of boat to bearing point of pole end 1430mm.
- Pole eye on mast 1070mm up.

OUTHAUL

Upwind set so that the sail just touches the leeward side of the boom as an average setting, then alter depending on wind / wave conditions.

MAST RAKE: Gaff Rig

There is only one way to measure mast rake accurately and this is with a tape measure from the top of the mast to the transom.

To do this in the Mirror you need to tighten the forestay so there is 180lbs of rig tension. Turn the boat on its side and measure the distance from the pin that holds the main halyard sheave in the top of the mast to the top of the transom (on the outside). This gives the mast rake.

Try to sail with a mast rake of between 3540mm and 3570mm.

WIND SPEED	0-4	5-9	10-14	15-19	20-24	25+
MAST RAKE	5020mm	5020mm	5020mm	5020mm	5010mm	5010mm
RIG TENSION SHROUDS	15	15	15	17	17	17
KICKER	Loose	Loose	Quite tight top tale stalling	Tighter	Lots	Lots
REASONS	Top telltale should be stalling 30% of the time.	Top telltale should be stalling 30% of the time.	Top telltale should be stalling 30% of the time.	To control twist & blade out mainsail.	To control twist & blade out mainsail.	To control twist & blade out mainsail.
OUTHAUL	Tight crease along foot	Tight, no crease	Loose, 15cm gap	Tighten	Tighten	Tight
DOWNHAUL	None	None	None	Slight	On hard with increasing wind	On hard
JIB HEIGHT (MEASURED FROM UPPERMOST POINT ON DECK)	15mm	25mm	25mm	25mm	15mm	Low as possible
JIB TENSION	2" of tight	1" of tight	Tight	Tight	Tight	Ease to foot

