

MERLIN ROCKET TUNING GUIDE.

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

PRE-BEND

This setting is the most important and so time should be spent getting this correct. The spreader deflection gives a good starting point but may need to be changed slightly to get the pre-bend exactly right.

We recommend sailing with a pre-bend of 20mm. To measure this, set the mast rake on setting 0 (see below) with rig tension of 250lbs. The pre-bend is then measured by pulling the main halyard tight against the top of the gooseneck. The distance between the halyard and the mast at spreader height is the pre-bend.

MAST RAKE

For the rest of this guide we will refer to settings 0 as fully upright and setting 8 as fully raked. Below is an idea of the conditions that fit each setting.

- Setting 0 – Drifting conditions up to Helm and Crew sitting on the side deck.
- Setting 1 – Helm and Crew sitting on the side up to both sitting out hard with mainsail still on the centre line.
- Setting 2-5 – Full power up to constantly over powered. (eg: spilling the main to de-power).
- Setting 6-8 – Constantly over powered.

INITIAL SET UP:

- Insure lowers and puller are slack at all times.
- Rig tension on shrouds should read 26 on a Loos professional gauge.
- Pull a tape to the top of mast to black band at the gooseneck should read 5720mm to give the datum point.
- Rake is measured from top of the mast to the top of the transom along the centre line of the boat.

READING ON MAST RAKE

- 0 – 7070mm
- 1 – 7020mm
- 2 – 6970mm
- 3 – 6920mm
- 4 – 6860mm
- 5 – 6810mm
- 6 – 6760mm
- 7 – 6710mm
- 8 – 6660mm

RIG TENSION

Rig tension should be set so a Loos Professional rig tension gauge reads 26 on setting 0 on the shroud. Rig tension does not need altering as you rake. This setting should mean the leeward shroud is slack with just enough tension to stop the leeward shroud from shaking.

LOWERS

When setting rig tension lowers should be slack. In very light winds the lowers should be slack to allow the mast to bend and make it easier for the wind to pass over the sail. As the wind increases the lowers should be pulled on to hold the mast straight and keep as much power in the sail as possible. When it gets to the point of being over powered the lowers can be eased slightly in order to de-power the rig but only after using the rake to de-power first.

JIB SHEETING

Set the rake at 0 and then alter the jib car so that the sheet bisects the clew at 45 degrees, once gained the general approach to setting the position of the car is the lighter the wind the further aft you needed to position the fairlead. As you rake from 0 – 8 move the car position forward one pin each time.

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.

MAST: A = 140mm
CARBON B = 370 mm
CREW WEIGHT:
ALL UP TO 18-24 STONES

KICKER

In light winds you should only put on enough kicker to remove the slack from the system when sailing upwind. Once you start becoming overpowered and have to ease the main you should aim to have the top leach telltale on the main flying approximately 85% of the time eg: occasionally flicking.

JIB CUNNINGHAM

This should be set to just remove the creases from the front of the jib. It will require more tension as the breeze increases.

CENTREBOARD

In very light wind you should have the centreboard angled forwards slightly. As you begin to get to the stage where you are both sitting on the side, the centreboard can be moved to the vertical.

When it is very breezy and you are seriously over powered, raising the centreboard up to a maximum of 8 inches this will help stop the boat tripping over it.