Hornet Tuning Guide

The following rig tuning guide was provided by Mark Hazelwood (ex-Hornet World Champion and formerly of Banks Sails). These figures are given as guidelines and should be used as a starting point for your boat. Individual boats will always have minor differences. Therefore these measurements should not be taken as hard and fast rules.

	Epsilon/M2	D/M3/M7
Rake	23'9.5"/7250mm	23'11"/7290mm
Rig Tension	350-400lb (Genoa luff)	350lb
Spreaders	Length 420mm Deflection 165-185mm	430mm 185-205mm
Heel Position	The front of the mast should be 25mm from the front of the mast gate.	
Pre-bend	0-10mm	0-25mm

It is important that the spreader deflection is set to give the correct pre-bend for your crew weight. Heavier crews should use less pre-bend than lighter crews. All crews will need to pre-bend the mast (increase spreader deflection) in non-trapezing conditions.

All measurements are based on a maximum length mast* and a Goodwin hull. Rake will be approximately 95mm less for a minimum length mast, and 35mm less for a Coombe/Lovett hull (because of higher transom). All measurements should be taken with full rig tension on and no deck control on.

Mainsail

Top Batten (full length) - Apply sufficient tension to just eliminate vertical creasing along the batten pocket.

Cunningham - Use only when overpowered to move draft forward and to open upper leech. Ignore horizontal creases on the mainsail luff, below 12 knots.

Outhaul - Generally very tight and ease approximately 75mm downwind. Consider easing slightly when sailing upwind in choppy conditions.

Kicking Strap - No tension until mainsheet has to be eased to prevent heeling, then only enough to maintain boom on the horizontal. Use a lot of tension in 15 knots+ or when seriously overpowered. In strong winds, use as much as physically possible and play the sheet constantly.

Boom Position - Light winds and crew to leeward, boom should be eased off the centreline. Boom should be sheeted on the centreline when helm and crew are both on the same side deck until overpowered, then drop the boom to leeward as the conditions dictate.

Deck Control - Limits the amount of lower mast bend and the overall fullness of the sail. Less control gives more mast bend and a flatter sail. More control gives less mast bend and a fuller sail. The actual setting will depend upon the crew weight, wind and wave conditions, and point of sailing.

Genoa

Sheeting - Leech should normally be set parallel to the centreline at spreader height. Variations of sheet tension and angles permit the genoa to take on many different aerofoil sections. Many settings can prove fast. In light winds, sheeting firmly along the foot to flatten the base and open the leech. In medium winds and a chop, sheet more down the leech with less sheet tension to produce a more powerful section.

Luff Tension - should be sufficient to just remove horizontal creasing and no more. If in doubt, leave slightly loose.

**The mast measurements allow 105mm variation in height of boom, ie ht. of mainsail can vary vertically 105mm relative to the jib, (the chosen height cannot be changed once the black bands are on). The high boom is the most common, ie the max length mast – 760mm between Bands 1 & 2. Check this when comparing rigs.*