



# FIREBALL TUNING GUIDE.

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

CROSS SECTION VIEW OF MAST + SPREADERS

MAST: CUMULUS / M7  
CREW WEIGHT: 81-85kg

A = 160mm  
B = 420mm



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.

**SPREADER ANGLE:**

24 stone **A:** 160mm / **B:** 410mm

26 stone **A:** 175mm / **B:** 420mm

28+ stone **A:** 180mm / **B:** 425mm

WIND SPEED (KNOTS)	1-4	1-4	5-9	5-9	10-15	10-15	16-20	21 - UP
SEA CONDITION	Flat	Choppy	Flat	Choppy	Flat	Choppy	-	-
MAST RAKE	22'6"/6908mm	22'8"/6900mm	22'6"/6900mm	22'6"/6900mm	22'4"/6850mm	22'4"/6820mm	22'2"/6810mm	22'2"/6810mm
RIG TENSION (JIB LUFF LOOS GAUGE)	29 3/4	29 3/4	29 3/4	30	30	31	32	32
KICKER	None	None	A bit	A bit	-	-	Loads	Loads
REASONS	-	-	Top telltales stalling 30%	To control twist and blade out mainsail	To control twist and blade out mainsail			
CUNNINGHAM	None	None	None	None	None	None	Yes	Yes - A lot
JIB FAIRLEADS	Lower line	Middle line	Lower line	Top line	Middle line	Top line	Top line	Top line
JIB FAIRLEADS FROM CENTRELINE	260mm	260mm	260mm	265mm	265-270mm	265-270mm	275-300mm	300mm
JIB SHEET TENSION	Normal	Ease 0.5cm	Normal	Normal	Normal	Normal	Ease 0.5cm-1.5cm	Ease 1.5cm-2cm
STRUT (FROM NEUTRAL)	0	0	0	0-0.5cm	0	0-1.5cm	0-2cm	2cm
JIB LUFF TENSION	Wrinkles	Wrinkles	Wrinkles	Wrinkles	No wrinkles	No wrinkles	Tight	Tight
CENTREBOARD POSITION	Forward	Forward	Forward	Forward	Upright 2.5cm	+2.5-6cm	+6-10cm	+10-12cm
OUTHAUL	Tight	3.8cm	2cm	2.5cm	0.5cm	1.3cm	Very tight	Very tight

**MAST RAKE:** Measured from top black band ie tape measure should read 19'8" to top of black band at gooseneck then read rake at top of the transom.

**PRE-BEND:** Rig tension on, main halyard tight to gooseneck, pre-bend equals distance at spreader height from mast track to halyard.

**DATUM:** this is a pre-bend of 25mm at spreader height.