

**Falcon F18 tuning matrix**

Revision: 3

Date: January 2015

**General rig settings**

Mast rake	22 cm down the transom (use trapwire at bridle method with 24 on the rig)
Rudder rake	Factory set
Spreader angle	140 kgs - 56mm; 150 kgs - 55mm; 160 kgs - 52 mm (measured with 36 on loos gage)
Spin luff	45° luff grab test
Outhaul	6 cm (+/- 3 knuckles) of gap between foot and boom with minimum downhaul applied

Windstrength	Drifting	Light	Single string	Dbl strng full power	Depowering	Very overpowered	
Diamonds (loose gauge)		36	36	36	39	41	43
Rig tension		24	24	24	26	28	28

Rig tension will differ according to sea state and crew weight. Tensions given are for medium weight crew and modest waves.  
In practice you do not want the leeward shroud to be very loose, it should only be loose from time to time.  
If it is never loose easy the tension, if it is too loose add tension

**Upwind**

Downhaul	+2		0	0 +1	+1-3	+4	
Rotation	MIDDLE DAGGER	REAR OF DAGGER	REAR OF DAGGER	REAR OF DAGGER	MID SIDE	OUTSIDE REAR BEAM	
Main traveller	Middle at all times, unless you are overpowered even with max downhaul Medium (use downhaul to keep the top of the sail open)						
Main sheet tension		Medium	Firm	Firm	Firm	Firm	
Jib car		355	285	285	285	325	370
Jib sheet tension	Light	Medium	Firm	Firm	Firm	Firm	
Daggerboards	DOWN	DOWN	DOWN	0 - +10CM	+20	+ 20-30	
Crew position	FORWARD	FORWARD	SHROUD	CBD	CBD	BEHIND CBD	

Keep the boat level with the water at all times. Active movement of the crew position especially downwind will have a big effect on speed

**Downwind**

Downhaul		0	0	0	0	0	0
Rotation		90	80	80	80	80	90
Spi halyard	-75MM	-50MM	-25MM			0	0
Main traveller	30 cm out of the middle	Middle	Middle	Middle	Middle	Middle	Middle
Main sheet tension	Light (keep leech tell tales flowing)	Medium (keep leech tell tales flowing)	Medium (keep leech tell tales flowing)	Medium (keep leech tell tales flowing)	Medium (keep leech tell tales flowing)	Medium (keep leech tell tales flowing)	Medium (keep leech tell tales flowing)
Jib sheet tension	Light	Medium	Medium	Medium (keep middle tell tale flowing (make sure not to sheet in jib too hard))	Medium (keep middle tell tale flowing (make sure not to sheet in jib too hard))	Medium (keep middle tell tale flowing (make sure not to sheet in jib too hard))	Medium (keep middle tell tale flowing (make sure not to sheet in jib too hard))
Daggerboards	UP 30CM	DOWN	UP 10	UP 20	UP 30-40	UP 40-50	
Crew position	OPPOSITE FORWARD	OPPOSITE FORWARD	SAME SIDE SHROUD	CREW OUT MID HULL	CREW OUT AFT	CREW OUT AFT	

Keep the boat level with the water at all times. Active movement of the crew position especially downwind will have a big effect on speed

LONG DAGGERBOARDS SHOULD BE RAISED ABOVE 18 KNOTS. EXTREME CONDITIONS (WAVES, STEERING) MIGHT CAUSE DAMAGE  
WINDWARD DIAMOND WIRE SHOULD NEVER GO SLACK WHILE SAILING  
FAILURE TO EASE DOWNHAUL OR RELEASE MAST ROTATION WHEN HEADING DOWN WIND UNDER SPIN CAN CAUSE DAMAGE TO THE MAST  
MAINSHEET TRIM UNDER SPIN IS CRITICAL FOR EFFICIENT SPEED. TOO LITTLE MAIN SHEET TENSION UNDER SPIN CAN CAUSE THE MAST TO BREAK.