

FALCON F16 TUNING MATRIX 7 (August 2015)

STARTING SETTINGS

MAST RAKE	MIDDLE TO FRONT OF REAR INSPECTION PORT USING TRAP METHOD AT THE CENTERLINE OF THE DECK. (CARBON MAST WILL BE AT THE REAR TO THE MIDDLE OF THE INSPECTION PORT)
SPREADER RAKE	60MM
DIAMOND TENSION	28 PRO LOOS GAGE
RIG TENSION	19-23
SPIN LUFF	45 DEGREE LUFF GRAB AND TWIST TEST
OUTHHAUL	3 KNUCKLES (+/-65mm) OF GAP BETWEEN FOOT AND BOOM WITH MINIMAL DOWNHAUL APPLIED

ON WATER CONDITION SETTINGS

Below settings we tend to do on the water as they depend not only on windstrength, but also on the gust and waves.
However in the sheet futher down you will find a good starting setting according to windstrength

RIG TENSION	ADJUST TENSION WITH STAYMASTERS SO UPWIND LEEWARD DIMOND WILL LOOSEN, BUT NOT WAVE AROUND
JIB CUNNY	UPWIND SET SO NO WRINKLES IN LUFF
JIB SHEET	TRIM TO TELLS - ALL 3 TELLS SHOULD BREAK TOGETHER
MAIN	TRIM TO TELLS

UPWIND SAILING

	< 5 knots	5-8 knots	8-12 knots	12-16 knots	16 to 20 knots	20+ knots
DOWN HAUL	DRIFTING	LIGHT	SINGLE TRAP	DOUBLE TRAP	DE-POWER	MAX DE-POWER
ROTATION	+2	0	0	+1-2	+3-4	5
DIAMONDS	MIDDLE DAGGER	REAR OF DAGGER	CENTER AFT DECK	CENTER AFT DECK	OUTSIDE REAR BEAM	INSIDE REAR BEAM
MAIN TRAVELLER	28	28	31	31	31-34	34-35
MAIN SHEET	MIDDLE	MIDDLE	MIDDLE	MIDDLE	MIDDLE	MIDDLE
MAIN SHEET	MEDIUM (careful not to flatten sail)	FIRM	FIRM	HARD	HARD	HARD
JIB CAR (MIDDLE OF CAR)	SCM FROM OUTER EDGE	16 CM FROM OUTER EDGE	16 CM FROM OUTER EDGE	10CM FROM OUTER EDGE	5CM FROM OUTER EDGE	5CM FROM OUTER EDGE
JIB	Middle hole	Middle hole	Middle hole	bottom hole	bottom hole	bottom hole
JIB SHEET	ALL TELL TALE FLOWING	ALL TELL TALE FLOWING	ALL TELL TALE FLOWING	TELL TALE FLOWS UP	TELL TALE FLOWS UP	TELL TALE FLOWS UP
DAGGERS (LONG)	DOWN	DOWN	DOWN	UP 10-20 CM	UP 20-30	UP 40CM
DAGGERS (STANDARD)	DOWN	DOWN	DOWN	DOWN	UP 10 CM	UP 20CM
CREW PLACEMENT	Skipper at front beam, crew in front	Skipper at front beam, crew in front	Skipper at side stay, crew just in front	Skipper at daggerboard, crew just in front	Crew at daggerboard, skipper just behind	Skipper 20cm in front of back beam, crew just in front

In most condions you should be able to sail the platform parallel to the water

DOWNWIND SAILING

	< 5 knots	5-8 knots	8-12 knots	12-16 knots	16 to 20 knots	20+ knots
DOWN HAUL	DRIFTING	LIGHT	SINGLE TRAP	DOUBLE TRAP	DE-POWER	MAX DE-POWER
ROTATION	0	0	0	0	0	0
DIAMONDS	90	80	80	75	75	90
MAIN TRAVELLER	10CM FROM THE MIDDLE	MIDDLE	MIDDLE	MIDDLE	MIDDLE	MIDDLE
MAIN SHEET	OPEN	OPEN	FIRM	FIRM	FIRM	AS HARD AS UPWIND
JIB SHEET	ALL TELL TALE FLOWING	ALL TELL TALE FLOWING	ALL TELL TALE FLOWING	TOP TALE TOO LOOSE	TOP 2 TALE TOO LOOSE	TOP 2 TALE TOO LOOSE
SPI HALYARD	-75MM	-50MM	-25MM	0	0	0
DAGGERS (LONG)	UP 30CM	DOWN	UP 10-20CM	UP 20-30CM	UP 40-50CM	UP +50CM
DAGGERS (STANDARD)	UP 10CM	DOWN	DOWN	DOWN	UP 20CM	UP 30CM
CREW PLACEMENT	Skipper at front beam, crew leeward side	Skipper at side stay, crew leeward	Skipper at side stay, both on same hull	Skipper between sidestay and back beam, crew behind in trapeze	Skipper at beam beam, towards middle op trampoline, crew on trapeze at backbeam	Skipper at beam beam, towards middle op trampoline, crew on trapeze in footstrap

NOTES:

0 DOWN HAUL SETTING IS NUMBER WHERE THE WRINKLES IN THE MAIN LUFF ARE JUST ABOUT REMOVED WITH SOME MAINSHEET TENSION APPLIED
DOWN HAUL REFERENCE HERE USES A RONSTAN MARKER STICKER WITH NUMBERS SPACES AT 18MM.
WITH FLAT WATER TEND TOWARDS USING FLATTER SAIL TRIM
IN GUSTY AND SHIFTING CONDITIONS TEND TOWARD RAISING THE DAGGERBOARDS, BOAT SHOULD ACCELERATE IN THE GUST NOT LIFT
WHEN IN DOUBT ON THE DAGGER BOARD POSITION, IT IS GENERALLY FASTER TO HAVE THEM TOO FAR UP AND SLOWER TO HAVE TOO MUCH DOWN

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.

MAX DOWN HAUL IS AT +5, ATTEMPTING TO GO MORE WILL LIKELY CAUSE DAMAGE TO THE SAIL AND OR THE MAST.