

DF65 Workshop Notes

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Stand	Joysway stand is unstable in the wind - Make your own. Search YouTube and web
Keel	Do not overtighten bolts - can strip threads and may cause hull cracking.
	Spray bolts and check regularly with CorrosionX (Whitworths \$35)
	Check keel seals so water doesn't fill up inside the keel.
	Cracking has been experienced by many boats around the keel box. If cracking occurs shortly after first use, contact HWH for a warranty replacement
	The most common causes of cracking can be - too much backstay, poor handling, leaving the boat rigged or in a hot car, dropping into the water.
	Prevention Options - Not Class Legal - Club only - Keel patches externally or epoxy resin internally
Rudder	Spray shaft before install and minimise a sloppy fitting
	Lubricated Braid, plumbers tape or a plastic straw in shaft can minimise slop. Replacement metal rudder post now available
	Remove slop in linkages - Steering arm at right angles to centre for maximum travel
	Vaseline inside the Bellows with a needle from a Chemist to prevent water pumping in.
	Manual says 45 degrees maximum rudder travel, but 35 degrees better so boat doesn't slow through tacks
	This can be done using the Transmitter functions. Consider 50% travel on Flysky i6 Tx
	Mark Exact centre and 35 degree range on hull
Sheets	Don't use Dyneema supplied - poor quality
	Thicker braid required to avoid bowsie slippage. 30-50 lb Dyneema/Spectra braid from fishing shops
Bowsie	Thread correct way - study hole shapes and entry point.
	Any knots are suitable - always add drop of Superglue to avoid slippage and untie
	Different types of braid line are easier to adjust and can add colour. Check out BCF for lower cost fishing supplies
Jib	Use spot of glue on counterbalance - they come lose and fall off.
	Don't use the tack hook - tie with braid
	Front Jib sheet Guide should be glued, but not the rear one near the clew
	Tie tack line as short as possible to keep close to deck. Fit loop first and mark the braid 8 mm above the deck eye.
	Don't glue the topping lift fitting into boom in case of braid break
	Try sail tell tales, but sensitivity and visibility can be an issue.
Mast Step/Gate	Check Tuning Guide for settings
Mast	Do not fit luff rings supplied. They tend to catch on the jib and can fall off.
	Do not glue the mast crane or stub (this is the most susceptible to breaks and you don't have to buy a complete mast kit)
	Don't overtighten the tiny gooseneck bolts or use Locktite - it destroys the ABS plastic.
	When gluing the boom into the gooseneck, retract it about 5-10 mm to give the clew a longer adjustment range, particularly on the A+ boom.
	Use a double purchase on the cummingham. Attach to boom first, thread up through tack and back through boom fitting.
	Lube the vang adjustment wheels before assembly. If they are tight, carefully widen the slot with a file or sandpaper.
	Use braid instead of the metal clips and allow 3.5mm gap for sail to flop to leeward. Glue the braid knot onto the mainsail to avoid snagging the jib topping lift
Backstay	Make the ring position 820mm from Crane for easier adjustment closer to the deck.
	Bowsie pull direction should be downwards

Mainsail	Tie single line to Crane avoid sail centering off the breeze in light winds. A loop will tend to centre the sail in light winds
	Set all bowsie positions with the sail winch fully in.
Mainsheet Bridle	Must be set so boom is equal both sides otherwise different trim on opposite tacks - not necessarily in the centre of the boat because of the mainsheel pulling angle.
	Keep it close to the boom - minimal clearance to boom and glue turning block into position
	The mainsheet wears on the bridle ring. Try small 3-4mm rings from BCF
Hatch Cover	Clear lid supplied will crack. Try acetate and tape
	Make it clear so you can see water ingress and condensation that will corrode small electrics
	Double check all hatch seals before launching
	Reinforce both sides of front battery hatch - Social racing only - Not Class legal
	Tie the stern rubber plug on!
	Even when water tight, moisture, heat and current from batteries will corrode fittings
	Have plenty of spare hatch covers in your kit. Only need to replace small forward hatch after every race day.
Batteries	Rx battery Max 6.6v and 45 grams weight limit
and	ONBO LiFe 850mAh batteries - 48grams \$15 from Association
Chargers	Hobby Warehouse LiFe 850mAh 45-46g \$14.50
	Hobby King Zippy LiFe 700mAh 42gm \$10 - needs weight added
	Consider heavier batteries in stronger winds and placed further back to lift bow trim.
	Care needed with LiFe Charger
	Velcro to side of keel box - far forward as possible
	Extension lead needed - 15-20mm
	Tx Rechargeable AA Cell battery pack \$25 Bunnings - BUT 1.2 volts = 4.8 total
	Corrosion X all leads
	Match black cables. Rx - black cable on outside
Electrics	Corrosion X inside servos, switch and Futaba connectors
	Corrosion X everything - often
	Small sponge in bilge
Transmitter	HWH - only Linear adjustment available - basic unit.
and	Flysky - Programmable Dual rate & Expo adjustment - preferred unit for about \$25 more.
Receiver	Dual antennae fitted at right angles and high up in the boat
	Antenna in straw under deck or vertical through hatch (seal hole)
Wind Pennants	Only use under 5 knots. Trial and error needed. Visibility and issue depending on eyesight.
Tuning Guide	Initial set up is pretty good. Boat should sail by itself to windward if balanced correctly. Record your own best settings.
	Refer to my Tuning Guide. Very sensitive to leach twist
	Mark all sheets and deck positions, and recheck before every race
Sail Numbers	Register Numbers with Australian DF65 Radio Sailing (ADF65RSA) website.
Decals	Refer rules for size and placement
Class Emblem	50 micron stick on vinyl best on 50 micron Mylar
	Use ink on 36 micron Mylar
	Narrow fonts - Arial Narrow, Bebas Neue, Steelfish
	Numbers - about 325 font - AUS Letter 155 font (approx. - test)
	Stencils available from me.

	Decal and Class Emblem "65" printing available from me in many colours
Miscellaneous	Try Collective Parts Orders with your Fleet to save postage
	Join ADF65RSA (its currently free) and NSWRYA (Membership, insurance and competitions \$10)
	Plenty of Resources available on Facebook, YouTube and Web
Sail making	Single panel construction. Check Facebook for posts of other boat colour schemes
	Mylar and fittings available from me. (also Soch Sails, Cat Sails overseas)
Rules	If it's not in the rules its not allowed. Don't try to invent something for a competitive advantage
	It's a ONE DESIGN Class with Restricted Changes allowed so everyone is the same
	Sail winch must be HWH supplied
	Any Rudder servo can be used but it must fit tray cut-out without modification. Any switch or receiver can be used
	At Club level, HAVE FUN, enjoy meeting old and new friends. Leave the Champs for competitive racing.
After Sailing in salt water	Wash boat immediately. Loosen lines
	Remove front hatch, stern bung and disconnect battery. Dry thoroughly
	Check all parts and lightly Spray fittings - particularly the bearings. Test and recharge batteries for next sail.