



# DragonFlite 95 Manual

## *Initial Setting up Procedure*

### **ENSURE TRANSMITTER AND RECEIVER BATTERIES ARE FULLY CHARGED.**

With your boat sitting on its stand, make sure the Transmitter has sufficient battery power, turn it on and if the voltage reading is around 4.5 volts – change the batteries otherwise they will stop working when you are sailing, also make sure your Receiver battery is fully charged.

While setting up the charging leads, check the receiver battery for any signs of green corrosion on/in the plugs, if noticed, a good spray using INOX Spray will normally clean the plug. DO NOT USE WD40 spray as it is based on kerosene and will attack plastics, rubber etc.

### **INSERT RECEIVER BATTERY INTO BOAT TRAY**

When inserting the battery, ensure that the Black/Red wires match otherwise it will not work.

**TIP:** *Mark the sides of the black plugs with a white paint pen so it is easy to hook up.*

Turn on Transmitter and then the Boat and test the rudder servo and winch to ensure everything is working properly.

Check rudder positioning to ensure it is central, otherwise further investigation required, check transmitter rudder trim switch, may have been accidentally moved. Adjust accordingly.

**TIP:** *If nothing happens, check battery plugs are put in correctly. If still nothing is happening, check receiver battery for charge status (May need to borrow a multi-meter to check voltage). Next thing is to ask for assistance from an experienced skipper.*

**TIP:** *Use a waterproof marker to mark a fine line where the rudder rear edge lines up with the mark.*

Once checked and working properly, then place plastic hatch on and tape it up ensuring it is watertight.

**TIP:** *Once a month, it is advisable to rub the edges of the hull around the hatch with a rag and methylated Spirits, to remove any residual adhesive left behind by the tape.*

## FITTING FIN AND BULB TO BOAT

Before inserting the fin into the boat, it is a good idea to check for any signs of corrosion coming up around where the Fin and bulb meet.

**TIP:** *During the week, when not sailing it is a good idea to take the fin out of the boat, stops cracking around the fin box, and if any corrosion noticed around the bulb, then take apart and clean all visible signs of corrosion (looks like a salty grey crust) and apply liberal amounts of Corrosion X or Vaseline. Clean and polish any areas on the bulb where the black paint is coming off, using Wet & Dry sandpaper 1200 to 2000 grit, touch up the paint with a black paint pen, and then sand lightly and polish to a smooth finish.*

Insert Fin into the Hull and ensure the hold down bolt is well oiled and that the Plastic retainer for the mainsheet Ring is a snug fit. DO NOT OVERTIGHTEN as this will split the plastic mainsheet holder.

Place the boat back on the stand.

## FITTING THE MAST AND SAILS.

Select the rig to use for the day, hopefully you will have at least an A Rig and a B Rig stored in a Sail Box, Sail Bag. If in doubt, rough rule of thumb is that the DF95 A rig is good to use up to 15knots, or if the boat is nosediving regularly downwind, then change to the smaller rig, also look at what the other sailors are using for the day.

**TIP:** *Sail Box or Sail Bags are an excellent way to store the sails, remember the sails are your engine so you need to really look after them! Would you race a V8 race car with a worn-out old motor? Creases and overstretching the luffs are a common problem.*

Hold the rig by the gooseneck in one hand and the jib (Foresail) in the other.

Ensure all the strings are free and not tangled and that the Jib (Front Sail) hasn't done a few twists and knotted up the top of the mast.

Insert the main mast into the hull in the location hole, ensure it has slid all the way to the bottom and then attach the Jib using the supplied tail. The sails will now start to move around a bit, which is ok. If they are flapping wildly, place the boat on its side so that it stops the sails flogging (Quickest way to destroy your sails).

Attach the mainsheet by inserting through the ring with 3 lines attached, and then onto the main winch clip.

Attach the jib sheet via the correct screw eye, down the side of the mast, through the screw eye closest to the edge of the hull, then onto the main winch clip. Make sure the main winch clip is closed correctly.

Attach the Backstay and tighten to roughly the right place. Mark with black pen for consistency.

## SETTING THE SAILS

Check the forestay tension by lightly tapping, it should be ok, but if it feels loose, then you need to tighten the top Bowsie and remeasure the Rake.

**TIP:** Now is a good time to check your mast rake, by using a tape measure or a dowel marked with the relevant forestay measurement (e.g. A Rig – 1135mm). You do not have to check this every time you sail but should be done if any changes have been made to the rig.

**TIP:** The forestay tension is extremely important as too little will cause the Jib to flog in the wind and the boat handling will make it difficult to tack. It is a fine balance between the forestay and the backstay that will ensure the right tension. As you gain experience, you will find subtle changes to this tension can help in light winds especially.

Now Turn on the Transmitter and then the boat, and then move the winch to the full in position.

Your sails will now be lined up with the centre of the boat. If not, look for the problem.

Now it is time to do the final setups and checks before launching the boat.

One of the best ways that I have been taught (5 times RC Sailing world champion, multiple classes), is to grip the boat by the fin near the fin box under the hull and lift off the stand. Now hold the boat with the bow pointing towards the ground/floor and holding it arm's length away from you, gently swing the boat from side to side. This will allow you to use the Backstay as a sight line and now you should have an idea of how much twist is in the Mainsail. If more than 50 – 60 mm, then tighten the gooseneck until the right twist is achieved.

**TIP:** Less twist for light winds, more twist as the breeze gets stronger. Best adjusted using the backstay when required.

Now, look at the mainsail sitting along the mast, if any wrinkles, tighten the Cunningham adjuster (Bowsie above gooseneck) until they just disappear.

Set the foot measurement to about 20mm from the centre of the boom. This should be altered by only millimeters for different breezes and wave conditions.

**TIP:** Continually swing the boat side to side so there is wind in the sails after each change, this will give you a better idea of how the sails are reacting while sailing.

Now check the main boom distance from the centre line, should be about 5 – 15 mm depending on the strength of the breeze. Adjust accordingly using the bowsie located under the main boom.

Now it's time to set the jib (Foresail).

While looking from behind the boat, match the Twist to the mainsail twist, swing the boat from side to side to see wind effect on both sails.

Now look at the distance that the end of the boom is from the mast, adjust if too close or too far out. 45 – 60 mm is adequate and can be fine-tuned once you have sailed on the course.

Check that the sails go all the way in and out, check the rear plug is in and you are now ready for launching.

**TIP:** When carrying the boat to the launch area, hold it by the fin up near the hull and let the sails off. This stops any unexpected gusts blowing the boat out of your hand. Try to hold it

*horizontally to minimize the flogging of the sails. Check that the boat is TURNED ON before launching.*

Kneel on the ramp and launch the boat, or gently hold it by the top of the mast and lower gently into the water. NEVER Launch the boat from waist height and throw it into the water, this will crack the hull around the fin.

**TIP:** *If possible, have a lanyard attached to your transmitter so it hangs securely from your neck. I have seen too many transmitters launched into the water, or the boat takes off to the other side while the skipper walks back to where they left the transmitter.*

Once launched, pull the sails on and check that they look good and setting well, then do a few practice runs to the top mark and through the start line to ensure everything is working well.

**NOW ENJOY YOUR DAY AND HAVE FUN WHILE SAILING WITH YOUR MATES.**



## After Sailing Procedure

### AFTER SAILING FOR THE DAY.

When finished sailing for the day, there are several things that need to be done prior to going home.

When taking the boat out of the water, let your sails off and sail slowly to where you are going to pick up the boat. Make sure to lift the boat out of the water with the sails let completely out, and as soon as possible, grab the boat by the fin directly under the mast and hold the boat away from you and clear the retrieval area as quickly as possible so that other skippers can get their boat.

Pull out the bung and drain any water from the hull and make a note of how much water drains out. If it is a significant amount, make a mental note to inspect the hull and /or hatch for poor sealing or cracks later.

**TIP:** *Drill a small hole in the top of the bung and using a piece of light string, tie it off to the backstay hook attached to the hull, this way you will not lose the bung.*

If sailing in Saltwater, it is a good time to wash the boat and sails with fresh water, if it is available.

Once boat is in its stand, wind the sails to about midway, and turn off the boat, then the Transmitter.

To disassemble it is the reverse to setting up.

Release Backstay and unhook, release all downhaul bowsies, undo the sheet ropes off the winch clip, then the jib attachment off the half hook.

Take hold of the mast and pull straight up and then place the jib alongside the mast laying across the mainsail. Then place into your sail bag / box for safe storage.

Now is a good time to remove the hatch and tape off the hull, carefully as you can crack the plastic hatch.

Unplug the receiver battery and remove from the boat.

Look inside the hull for any remaining water, shouldn't be, but sometimes a bit remains behind.

Look at the electrics attached to the tray inside the hull and note if any water drops are lying around. If so, spray with INOX Spray and wipe off with a soft rag.

Remove the Fin and rudder for safe transporting.

**GO AND SOCIALIZE AND HELP WITH THE OTHER SKIPPERS. HOPE YOU HAVE HAD FUN,  
LEAVE WITH A SMILE.**



# Ongoing Maintenance Procedure

## MAINTAINING YOUR BOAT AND SAILS

After sailing, one first things to do is spray the hull, fin, bulb and sails with Windex and wipe off using an old cotton T-Shirt. This will remove any grime, salt and marks so corrosion will not be a problem.

**TIP:** *Place the plastic hatch back onto the hull before spraying so the electrics in the hull are kept dry.*

While wiping the hull, fin, bulb and sails, investigate for any wear and tear on the sheet lines, cracks in the hull, marks on the hull, fin and bulb, check the sails for any major tears, are the stick-on reinforcing tapes lifting?

Now is a good time to oil the bearings in the gooseneck using Corrosion X or Speed X or light machine oil.

Oil or Vaseline the rudder shaft and the alloy fittings to ensure they are free of any stickiness.

Now is a good time, after the hull, rudder, fin and bulb are dry, to polish them using a good car polish (not Cutting compound) and microfiber rags.

Charge the Receiver battery and change the Transmitter batteries if they have dropped their voltage to around 4.5 Volts.

Store the hull without the fin attached, however if using the supplied indoor black plastic stand with the fin attached to the boat, make sure to support the boat with a piece of foam under the bulb to take some of the weight.

By following these basic procedures, you will have many hours of enjoyment with your reliable seaworthy boat.

Do not delay in seeking assistance from your club members if something does not look right and is not normal.

## SUPPLIER LINKS:

Main supplier of DF95 Parts and gear: [www.hobbywarehouse.com.au](http://www.hobbywarehouse.com.au)

(all DF95 parts are available from Hobby Warehouse, easy to use site and ordering online is very easy)

Speed X / Corrosion X Supplier: [www.rudiosailingshop.com.au](http://www.rudiosailingshop.com.au)

(You will find Radio Sailing shop has a huge range of RC sailing gear, but little in the way for the DF95. Great people and easy to deal with, I have used them for about 15 years)

INOX Spray: [www.supercheapauto.com.au](http://www.supercheapauto.com.au)

(INOX is a lanolin-based spray and can be found at any Auto spare parts shop or BCF.)