

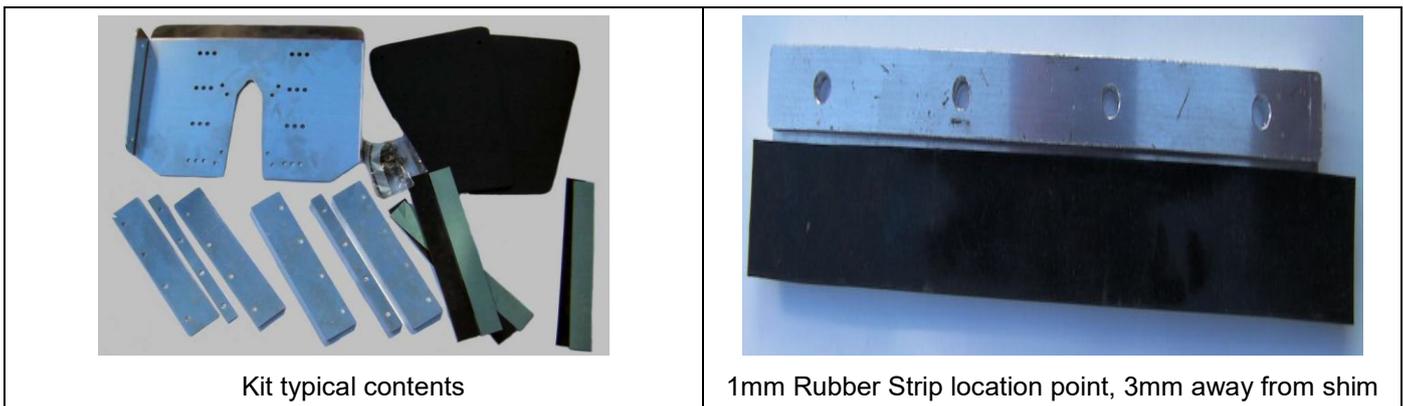
# Hydrofin DRS & Hydrofin DRL Instructions

**Please read all pages before you start to fit this DIY kit.**

## DIY Fit Instructions - "No drill, just clamp kit"

**NOTE:** ALL SIDE RUDDERS ARE FITTED ON THE HORIZONTAL, NOT VERTICALLY

Each Hydrofin unit comes complete, ready to DIY assemble.



**Look at the clamp set: 4 x Large Plates and 2 x Shims** and choose the best surface on the large plates to be the upper plates "seen" on top of the fitted Hydrofin. (This as handmade and marks / sanding). Take the bottom plates and fit the 1mm Rubber Strip to each. Locate so hangs over edge slightly and not touch the shim plate when assembled by being approximately 3mm away from the shim.

**Then assemble the clamp set** to the Hydrofin body width using the "best fit" hole sets. Shims as close to the cavitation plate as possible and thus most of the plates overhanging as a clamping surface. Measure the width of the cavitation plate, then lay out the shims on the Hydrofin body holes sets, to match this measurement.

**Initially slide on for any adjustment requirements.** This could be an anode needing adjustment or re locating. The plates on alternative hole groups or cutting / filing the plate to best fit the engine body. The aim should be to have 20mm to 25mm of the 30mm clamping plate gap over the cavitation plate.

**Locate the 2mm Rubber Strips** onto the top of the clean cavitation plate along the edge about 4mm in. (If unable to clean enough, stick the rubber strips to the Hydrofin body instead, after measuring for it).

**The order of assembly is:** 35mm bolt, 14mm washer, Top Plate, Hydrofin body, Shim underneath and then Bottom Plate with the 1mm Rubber Strip applied, 14mm Washer and Nyloc Nut.

**Fitting the Plastic Rudder fins:** Fins are handed, labels outward top and the angle forward into flow. Fixings order: 20mm bolt, 25mm washer, thru plastic and metal then standard 12mm washer and Nyloc Nut. Plastic fins should be fitted on the horizontal position for all Hydrofin models.

**Locate the completed unit,** adjust for square positioning. Check underneath for propeller clearance. Tighten the 4 x outer corner bolts to just under hand tight so you can final position the Hydrofin on the rubber sandwich. Tighten a little more when happy to stop the unit moving out of position. Tighten the 4 x inner bolts to hand tight plus. This will loosen the outer fixings so readjust them to match the hand tight plus torque. Check positioning and tighten all the 8 x fixing nuts to 5 Newtons of torque. This is similar to maximum tightness when holding a quarter inch racket with your hand over the centre line and NOT at the handle end. Final overall check of 10% of a turn to nip up all nuts to equal "feel".

You will be surprised with the snug fit. We trust “feel” more than just a torque wrench setting.

This completes the installation. Everything has been tightened down, just check the fins for alignment and nudge if required to be equal in positioning as the 3mm aluminium side fins will give enough to facilitate this type of adjustment.



Yamaha 60hp



Yamaha 60hp



Honda 15hp



Honda 15hp

This should now complete the fitting for your DIY kit. All parts are available.

**Kit Contents:** 1 Hydrofin Body, 2 x Rudder Fins, 4 x Large Plates / 2 x Shims, 2 x 2mm and 2 x 1mm Rubber Strips. 8 x 35mm Bolts / 4 x 20mm Bolts, 16 x 14mm washers / 4 x 12mm washers / 4 x 25mm washers, 12 x M6 Nyloc Nuts.

Fitting video showing more detail is on the Safeboat web site [www.safeboat.co.uk](http://www.safeboat.co.uk).

This should now complete the fitting for your DRS or DRL DIY kit.

All parts are available as spares by contacting us: **E:** [steve@safeboat.co.uk](mailto:steve@safeboat.co.uk) **T:** (+44) 01638 721509

*Designed here using Formula 1, rear wing aerofoil knowledge, in June 2019.*

*The NEW Hydrofin, that will lift, stabilize and with Dual Rudder, give controlled steering.*

***It will transform your boat handling characteristics to handle well. Now enjoy your boat more!***