

RS Vareo

OWNER'S MANUAL

LDC Racing Sailboats, Trafalgar Close, Chandlers Ford, Eastleigh SO53 4BW, GBR
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INTRODUCTION

Congratulations on the purchase of your new RS Vareo and thank you for choosing an RS. We are confident that you will have many hours of great sailing and racing in this excellent and versatile sailboat.

Important Note

The RS Vareo is an exciting boat to sail and offers fantastic performance. It is a light weight dinghy and should be treated with care. **In order to get the most enjoyment from your boat and maintain it in top condition, please read this manual carefully.**

Whilst your RS boat has been carefully prepared, it is important that new owners should check that shackles, knots, mast step bolts etc. are tight. This is especially important when the boat is new, as travelling can loosen seemingly tight fittings and knots. It is also important to regularly check such items prior to sailing. Make sure that you have a basic tool kit with you the first time you rig the boat in case there are tuning / settings changes that you wish to make.

First time out

Apologies to all the highly experienced, race winning and world girdling yachtsmen amongst you for this last piece of advice! New boats always take some getting used to. If it is blowing the doors off and the waves are dumping on the beach, why not curb that impatience to get afloat in your new toy. If the conditions are favourable, the chances are that you'll have far more fun and learn the techniques used in the RS Vareo much more quickly.

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LDC Racing Sailboats
Trafalgar Close
Chandlers Ford
Eastleigh
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Tel. 023 8027 4500
Fax. 023 8027 4800
Email. rs@ldcracingsailboats.co.uk

EC DECLARATION OF CONFORMITY TO DIRECTIVE 94/25/CE

I declare that the craft described as:

RS Vareo

Bearing the Hull Identification Number:

G	B	L	D	C	V								
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Conforms to EU Recreational Craft Directive 94/25/EC

Annex 1 – sections 3.2 & 3.3 and Annex 6 – Module Aa

EU Notified Body: No. 0808 (Irish Sailing Assoc.)

ISO Standards	BS EN ISO 10087, 12217, 12215, 10240, 14945, 8666
Trade Marque	RS Racing
Type	RS Vareo
Design Category	C
Maximum Crew	3
Maximum Load	250kg
Overall Length	4.25m
Builders Name	LDC Racing Sailboats, England

Date ___ / ___ / ___

(The date does not indicate the date of manufacture)

Signed Name: _____

Signature: _____

RIGGING INSTRUCTIONS

Stepping the mast

- 1). Ensure that the shrouds are securely attached and that the main halyard is “lowered” so that it can be reached when the mast is up. If you have the asymmetric spinnaker equipment, see **Rigging the asymmetric spinnaker** below.
- 2). Check that the mast pot in the boat is clean, and free of sand.
- 3). Stand up the mast and lift it into the boat. Pass the mast heel down through the mast gate and into the mast pot below.
- 4). Clip the shrouds to the u-bolts on the gunwales. Note, pulling on the main halyard to bend the mast will make it easier to clip on the shrouds.

Attaching the boom

- 1). Thread the mainsheet as follows:
 - Through the centre jammer cleat and ratchet block (make sure you go through the ratchet block the right way, so that it grips the rope when the sheet pulls out and runs freely when you pull the sheet in)
 - Through the block in the middle of the boom
 - Into the boom through the forward slot in the underside
 - Back out of the boom through the aft hole in the underside
 - Through the block on the aft end of the boom
 - Through the block on the mainsheet bridle across the stern of the boat
 - Pass through the lacing eye on the boom end and secure with a stopper knot
- 2). Tie the rope at the top of the kicking strap purchase around the boom, passing it through the stainless steel loop on the top of the boom.

Rigging the asymmetric spinnaker (optional equipment)

The first task before rigging the spinnaker for the first time is to ensure that there are no sharp edges or corners which might snag and tear the sail. Check that fittings and fixtures do not have any burrs or gnarls, and that the edges of the laminate around the mast gate and spinnaker sock are fair. Whilst every care is taken during fit out of your Vareo from time to time it is impossible to spot these hazards before the boat is fully rigged.

- 1). Before stepping the mast, thread the spinnaker halyard through the block on the top section. Lead both ends down so that you can reach them when the mast is in the boat.
- 2). When the mast is stepped, thread the halyard as follows:
 - Through the slot in the mast gate forward of the mast.
 - Through the block on the deck forward of the mast pot.
 - Through the block on the end of the bowsprit launch line.
 - Back under the mast gate, and through the halyard cleat and hoist block near the centre jammer.
 - Through the block at the aft end of the spinnaker chute sock.
 - Forward through the spinnaker sock.

3). Attach the spinnaker as follows:

- Tie the tack line that emerges from the forward end of the bowsprit to the tack of the spinnaker.
- Tie halyard to the head of the sail.
- Tie one end of the spinnaker sheet to the clew of the sail. Pass the other end through the block on the side deck, across the boat behind the mainsheet jammer, under the boom and through the block on the other side.
- The end of the halyard that emerges from the spinnaker chute forms the downhaul for the sail. Pass the downhaul outside of the spinnaker sheets, through the ring on the lower downhaul patch on the sail and tie it onto the upper patch.

4). Pull the spinnaker into the sock using the downhaul from aft of the chute sock.

Rigging the mainsail

1). Tie the main halyard to the head of the sail.

2). Tie the clew around the boom, so that the sail is held close to the boom.

3). Thread the outhaul rope through the clew cringle and back to the bullseye on the end of the boom where it is tied off.

4). Fit the forward end of the boom onto the gooseneck.

5). Thread the cunningham line through the cringle above the tack and tie the end around the gooseneck fitting.

6). Hoist the sail when ready to launch and fit the tack strap around the mast. The halyard cleat is found at the top of the mast. To release the halyard from the cleat pull the line downwards and outwards from the mast. Once cleated at the top of the mast, the loose halyard should be secured using the inglefield clip to its matching end on elastic on one side of the mast pot. The excess rope can be coiled up and poked inside the inboard end of the boom.

Your new sail is supplied with little or no batten tension applied to protect its shape in storage. Before hoisting the sail it will be necessary to tie in the battens and tension the sail. Finger tension is sufficient to begin with. It is not necessary to release the tension after every sail, but during winter storage it is worth easing the tension on the battens.

If you find that the halyard is very stiff upon hoisting the sail, then an application of dry lubricant into the mast track will reduce the friction between the luff of the sail and the mast. With any fully battened mainsail it is important that the boat is bow to the wind and that the mainsail battens are all shaped in one direction whilst raising the sail.

Rudder and daggerboard

1). The rudder drops on to the pintle and gudgeon on the transom. To lower the rudder, wait until you are in deep water, ensure the pivot wing nut is eased and tension the downhaul rope under the tiller. Finally, tighten the wing nut on the rudder stock for a positive fit between blade and stock. Ensure that the rudder has clicked past the retainer fitting. A tight fit of the pintles ensures maximum feel from the rudder blade to the helm, and eliminates 'slop'. For this reason the rudder may require some working from side to side to affix and remove.

2). Connect the tiller extension to the tiller by pushing the red joint into the housing and locking the bayonet clip by rotating the outer collar. The flexible joint of the tiller extension will perform better if it is removed from the tiller after use.

3). The daggerboard simply drops into the case. Secure the daggerboard in place using the shockcord and hook. The daggerboard should be stiff enough in its housing to stop at the point it is raised, and initially may be quite stiff to pull up and down. This ensures that there is no 'slop' or movement in the case helps give the Vareo its characteristic and precise feel and control. Should you find the daggerboard to be over stiff, gentle abrasion of the inside lip of the case and the daggerboard itself will improve movement.

TUNING AND SAILING TIPS

Cunningham

Increasing the cunningham tension progressively bends the mast, flattens the sail and opens the leech. In lighter airs keep it fairly slack and progressively increase the tension up the wind range

Kicker

The more wind there is, the more kicker you need. It powers up the leech helping pointing upwind and maintaining power on the reaches. In very gusty conditions, easing it will make the rig more forgiving. Ease it substantially down wind.

Daggerboard

Upwind -The daggerboard should be fully lowered unless it is very windy, when it can be raised about 6 inches.

Downwind – Raise the daggerboard about one foot when sailing downwind with the mainsail only. Leave the daggerboard fully lowered if you are sailing with the spinnaker.

Tacking

Make sure the boat is level and sailing as fast as possible when initiating the tack.

Be prepared to ease the mainsheet enough as the boat comes onto the new tack so that the boat does not heel or be blown back into irons.

Gybing – mainsail only

Always gybe with the boat sailing as fast as possible. In breezy conditions the helmsman should steer back into the gybe as the boom comes across, so that the boat is travelling straight downwind as the sails fill on the new side.

Very light winds

In sub planing conditions it pays to keep your weight well forward in the boat. Try to eliminate the 'wash' generated by the rudder as a guideline to trim. You may find that the battens are easier to tack if the tension is gently eased in the sail.

Sailing with the asymmetric spinnaker

This is where all similarity ends with existing single handers, and the real fun begins. Don't be too hasty to get the kite up – it makes sense to have familiarised yourself with the boat, especially downwind on the angles of sailing that you would be hoisting or dropping the kite. For the first trial the wind should be no more than 10-12 knots.

Hoisting the spinnaker

So when the moment comes bear off onto a broad reach with plenty of room to leeward. Ease the mainsheet right out with the boom nearly to the shroud, and the kicker eased as usual for downwind sailing.

In most conditions you should be able to stand up in the boat and steer with the tiller between your legs. Hoist the spinnaker as quickly as possible.

Sit back down on the windward side deck, pick up the spinnaker sheet and fill the kite and head up slightly to gain speed. You will probably need to grip the spinnaker sheet in your tiller hand while you pull the mainsheet back in somewhat.

For those of you familiar with asymmetric sailing, you will remember how important it is to ease the kite as far as possible, so the luff is on the verge of curling. An over-sheeted kite is such a killer to speed. Conversely nothing will drop you in the drink faster than a collapsing kite – so forget the mainsail and stay sharp focusing on the luff of the kite!

Gybing

Bear off easing the kite as you go. Put the kite sheet in your tiller hand and reach in to uncleat the mainsheet. The quicker you do this the better, as the boat will have slowed down and the mainsheet will have loaded up – you'll get to know this feeling and react to it faster each time!

Whilst broad reaching, as you now are, pick up the windward sheet with your front hand and pull it in, so that as you bear off more to initiate the gybe, the kite is slightly hooked to windward at the clew. It should still be filling normally and helping to speed the boat into the gybe. Initiate the gybe, and cross over, pulling the new sheet in as far as you can, hopefully to fill the kite on the new gybe with it barely collapsing at all. Fill the kite normally, luff up slightly and pull in the main again.

Dropping the spinnaker

Bear off again and ease the mainsheet exactly as you would when hoisting the spinnaker. Stand up and steer with the tiller between your legs. Pick up the downhaul and pull in the slack. Release the halliard from the cleat and pull the sail down as fast as you can. Tidy the sheets.

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CARE AND MAINTENANCE

Hull

The RS Vareo is made using a polyester GRP laminate. The boat should be supported ashore on a recognised RS Vareo trolley and care must be taken at all times to prevent abrasion or impact.

Keep your dinghy drained and well ventilated

Obviously in dealing with a marine environment, equipment gets wet, which in itself is not a problem. The problem starts when moisture is trapped for any length of time. The key, therefore, is to store the boat properly ashore. Water absorption could cause blistering and a raised fibre pattern.

Ensure the boat is kept with the bow lifted to allow water to drain away out of the aft end of the cockpit.

Wash with fresh water

Fresh water evaporates far more quickly than salt water, so if your dinghy has been sailed in salt water wash it off thoroughly. The fittings will also work better if regularly washed. Its is also worth washing sand and sediment off of the working parts of the boat, especially around the mast pot and gennaker pole launch point before you go sailing.

Damage

Hull damage falls into three categories:

- a) **SERIOUS** e.g. Large hole, split, crack or worse. Don't be too distressed! Get the remnants back to RS Racing – most problems can be repaired by an RS expert.
- b) **MEDIUM** e.g. Small hole or split, gel crazing. If this occurs during an event, sailing can often be continued as long as leaking can be prevented by drying the area and applying a strong adhesive tape. **CAUTION** – if the damage is close to a heavily loaded point then a close examination should be made to ensure joints and the laminate are fit for the prevailing conditions. Get the damage properly repaired as soon as possible.
- c) **SMALL** e.g. chips, scratching. This type of damage is not life threatening, particularly as modern build techniques allows very little water absorption into the laminate. This type of damage can be repaired by the owner, using the correct RS gel coat.

Tying down

Tying down your RS Vareo to its trailer is important because too much or too little tension could result in damage. Only use an RS approved trolley. The boat is well located on its trolley, so you only need apply sufficient tension to hold the boat in contact with the supports.

Tie the boat down at the bow and across the middle in the region of the trailer wheels. Pad the deck where the straps touch. An RS Transom kit will make attaching the mast and lighting board much easier

Foils

The foils are GRP with a foam core. Look after them as you do the hull. Wash with fresh water regularly. Repair any chips as soon as possible. An RS gel coat kit or Plastic Padding type filler is perfect. An epoxy filler will not adhere as well as a polyester type.

If you intend to travel a lot with the boat, then an RS padded rudder bag will be a worthwhile investment.

Spars

Wash with fresh water as often as possible. Check the sheave at the mast head for wear, and ensure that sand, salt or sediment is not able to gather at the bottom of the mast pot.

Sails

The main should be rolled and stored dry, out of direct sunlight. Dry the spinnaker, fold it and store in its bag.

When using a new sail for the first time, try to avoid extreme conditions because high loads on new sailcloth can diminish the racing life of the sail.

If your sail is stained in any way, try to remove it using normal detergent and warm water. Do not attempt to launder the sail yourself.

Repairs should be temporarily made using sticky number cloth or sail repair tape and then returned to the sailmaker for a professional repair. Watch out for wear and tear, especially around batten pockets and bolt rope.

Mylar laminate sails have better longevity than more traditional cloths, and to prolong this lifespan you should take care not to crease or score the sailcloth whilst raising and dropping the sail. An application of dry lubricant in the sailtrack on the mast will ease hoisting and help avoid friction damage to the luff of the sail around the batten pockets.

RS CLASS ASSOCIATION

www.rs-association.com

The RS Class Association is highly active and you really should join.

The **RS Racing Circuits** are the envy of the dinghy world, with great competition and a fantastic and friendly social life. The RS Association also organises **Training Events** throughout the year. **Social** highlights such as the RS Ball are not to be missed!

The Class Association produces regular, informative Newsletters, and a Yearbook. There is also an extremely comprehensive RS Association web site, part of which is only accessible to RS members.

In addition, the Association maintains the Class Rules, which are the “fabric” of any one design class. Without these the Class would disintegrate and values would tumble.

The Association relies on the support of the owners of the boats to financially survive. Membership costs only £33.00 per year (£15 for Youth membership) and without it, you won't even know what you are missing!

You should have received a membership application form with your new boat, but if not, please contact the RS Class Membership Secretary Jill Line on 01275 872466, jill@the-j-team.fsnet.co.uk, or see under 'Documents' on the website.

Members receive a voucher towards the cost of boat insurance with Noble Marine Insurance.

Any other queries about the Association should be directed to the RS Association Administrator, Heather Chipperfield, on 01590 610273, heatherc@rs-association.com.

INSURANCE

The Class Association has organised an insurance scheme with M A Noble Insurance Brokers. They are highly efficient to deal with and always fast and fair when it comes to making a claim. In addition, Noble are a significant supporter of the RS Class Association with a commission payment for each policy sold.

We recommend that you contact Noble Insurance to insure your RS Vareo

Tel. 01636 707606

Fax. 01636 707632