

## **PURCHASING A WESTERLY CENTAUR**

As a WOA Boatline Member I am frequently asked what to look out for when buying a Centaur. I have owned mine for 20 years. This advice is intended for those wishing to inspect a small number of boats before selecting one to have surveyed professionally, with a view to making an offer to purchase.

Do not be tempted to buy without a survey by a Yacht Brokers' Designers' and Surveyors' Association accredited surveyor (YBDSA) with professional indemnity insurance. This article is a limited list of preliminary checks a prospective owner can carry out. It is no substitute for a professional survey. A survey is a comprehensive examination that safeguards all aboard and the financial investment. Sight of it may be required by your insurer. A survey will almost certainly throw up negotiating points that will save the purchaser its cost. Survey the surveyor. As Ian Nicholson said, "Anyone who has been at sea in a gale is unlikely to make a slovenly surveyor".

Be aware that a surveyor is not necessarily a marine engineer or marine electrician and therefore his comments in these areas may be restricted. If in doubt employ a mechanic or electrician.

I begin with some generalities then focus on specifics. You are talking about surveying GRP yachts most of which are around 30 or 40 years old. Much is generic to any GRP yacht but there are masses of things to check and assess for condition. Sails, spray hood, dodgers, mainsail cover, batteries and chain cable will add up if you have to replace them. A good start is reading Ian Nicholson's "Surveying Small Craft". There are many other books you can turn to for in depth information such as Hugo du Plessis "Fibreglass Boats".

Most insurers regard ten years as the life of standing rigging. I extend that because I take my mast down every year for the winter.

The superior build quality of the Centaur can be seen from the extensive use of stainless steel for keel studs, rudder shaft and propeller shaft, the aerofoil shape of the keel castings, quality of the hardwood joinery and generous scantlings, thinking particularly of the GRP lay up.

You can look for obvious signs of osmosis but this is particular territory for an experienced surveyor with a moisture meter, similarly mechanical damage. A surveyor will be aware of the potential for more extensive damage by transmitted shock rather than just immediate impact area.

Addressing the problems listed is within the scope of most owners and is covered by Westerly Owners' Association technical articles published in the magazine. Many of these are now available in the members' area of the WOA website.

This advice is usually requested by first time boat purchasers. Before spending money on the boat do realise that the best accessory you can buy for your boat is good training. However, most shore based training takes place in the winter months whereas boats tend to be bought in the spring. If new to yacht cruising, RYA shore based training is likely to enable you to get

more out of your boat than any other purchase so make a note in your diary for next September.

## **Hull and keels**

Check for leaks around the keel studs. The nuts may need re-sealing or the keels rebedding. Simply further tightening the nuts on leaking studs is unlikely to rectify the problem and may result in damage.\* Sooner or later the keels need rebedding\*. Keels that have been neglected and are badly rusted are likely to need this earlier than might otherwise have been the case. \*

Internally, check for damage to the GRP keel stub webs (the internal stiffening around the keel stubs). The Centaur has a wide chord (widely splayed keels), making the roots of the keels stubs vulnerable to cracking if the boat is bumped on hard ground. \*

The Centaur rudder stock can also be bent by bumping on hard ground. Check that it is straight and the rudder operates smoothly from stop to stop. Some American Westerly owners have been reported to cut 10cm off the end of the rudder blade to reduce this possibility. \*

Check the rudder top hat bushes by attempting to lift the rudder. If the bushes are worn the rudder can slop up and down making an alarming knock when settling on mud. The bushes of acetyl, hard nylon or similar are easily turned and replaced but the process requires sufficient space below for rudder lowering and removal. This may necessitate raising the boat or digging a hole in the ground under the rudder. \*

Check the lower edges of the rudder blade for chips and wicking up the GRP. If the boat is to live on a drying mooring the rudder blade can be protected with a half height stainless steel boot, made up by a stainless steel fabricator. \* Further hull protection can be applied in the form of epoxy. \*

Lateral play in the tiller box can be taken up with shims made from copper or brass sheet.

## **Engine**

The original Volvo MDIIB was raw water cooled. External appearance can be deceiving; seawater circulating in the engine block galleries is corrosive. Modern marine engines use a heat exchanger and have a corrosion inhibiting coolant circulating round the engine. If you do have a mechanical problem with an old engine things can break when you attempt to dismantle it.

When you view, ask the owner to give the engine a good run. Ashore this can be done with a bucket over the stern, with a drain elbow in the exhaust pipe and extending the intake hose to recirculate the same water. Check the engine is cold when started. You need to know it will start easily from cold. The oil pressure warning light should come on when power to the engine is turned on and it should go out when the engine is running. If an oil pressure gauge

is fitted, watch it as the engine warms up. Oil pressure should be maintained at running temperature though will decrease as the oil warms reducing its viscosity. Check that the cooling water is circulating, for oil leaks, excessive smoke, excessive oil spewing out with the cooling water and bad news noise. If in doubt get a mechanic to look at it.

The WOA magazine has covered replacement with several different engines.

An original mild steel diesel tank is probably nearing the end of its useful life. Replacing it means taking the engine out or at least moving it well forward to get the tank out through the cockpit sole hatch. If replacing the engine it is an appropriate time to replace the original fuel tank with a stainless steel one. A bulkhead fuel filter with sight glass should be free of water. If there isn't one it is recommended one is fitted.

**Aside on shafts** - When built my boat was not fitted with a flexible coupling on the shaft. When bought it had just been refitted with a new Volvo 2002. I replaced the shaft and Cutless (sic not cutlass) rubber bearing, fitting a flexible coupling and clamp on coupling instead of the original flange. I left the new shaft long enough to accommodate a rope cutter and to allow for future shortening to present fresh surface to the stern gland packing. \*

## **Deck**

Examine deck areas around the cap shroud chain plates for lifting. If necessary this can be rectified by fitting longer U-bolts and more extensive backing pads bedded in fibre glass. \*

Examine the deck at the foot of the mast for excessive depression of the deck moulding (balsa sandwich).

Examine the mast compression strut for any sign of bending. \*

My boat had no conduit in the mast. I ran the masthead cables down the back stay because of the noise they made slapping from side to side in the mast when lying at anchor. It also means you don't have deck plugs - vulnerable to water leaks. The cables conveniently go below under the edge of the aft cockpit locker ventilator, sealed with silicone sealant.

Winch pawls and bearings may be well worn. Replacement pawls and their springs can be bought and winch barrel bush bearings turned to fit by a machine shop.

Check for leaks from the attachment bolts of the cockpit seat slats if present. These slats have often been removed and the cockpit seats covered with Treadmaster.

Check the mainsheet traveller carriage wheels. Earlier examples had a bolt through each end of the main sheet horse to stop the traveller coming off the end. The sharp hexagonal nut and bolt head of these stops can damage the traveller wheels leading to it letting go.

Check that the stanchions will move in their sockets. If not, try the penetrating oil Plus Gas. Failing that heat may be needed to free a stubborn one. Wait for a frosty morning, put wet cloths round the stanchion base and toe rail and with care apply heat.

Check crazing of the grp round stanchion bases is not excessive.

Drain holes in the main hatch runners are often blocked – poke them out to reduce leaks below.

The original forward opening fore hatch does not meet RORC rules. Its seal is often due replacement, as are the port light seals. On older boats the Whale bilge pump in the stern locker does not meet modern requirements as it requires opening of the locker to operate it. It can be refitted to comply. The cockpit drains are also smaller diameter than modern requirements.

Cockpit drain hoses often cross over to avoid back flow into the cockpit. This is not the case for the Centaur and experience suggests it does not matter.

The stern locker lid rarely has adequate sealing but this is easily rectified by building up a seal from closed cell foam sheet.

## **Below**

Most Centaurs originally had no dedicated vented gas cylinder locker and the rubber piping at the cooker and cylinder is often time expired. LPG on small boats is one of the greatest dangers afloat so merits careful consideration. A gas locker may have to be fitted or cylinders moved on deck for a canal operation certificate in the UK and on the Continent. \*

Check for any leaks from the fresh water tank (it is glassed in so a lot of work to repair/replace). Slide a bendy piece of wood into the compartment where the tank outlet exits to check for water under the tank. \*

The original Whale Tiptoe galley pump may need replacement. The galley partition and bottom shelf are easily moved to do this. A later model pump is available from Whale and only requires drilling of three new holes to fit. One screw retains the partition which holds the lower shelf in place. If the pump leaks the contents of the FW tank can flow into the boat.

Check for window leaks, especially if the lower shroud chain plates are over the windows. Most of the older boats need the window seals replacing. \*

If ashore, a bucket of water can be tipped into the heads and pumped out. However this will not check that the toilet flushes. Blakes bronze seacocks were only fitted to the toilet. These need stripping and greasing annually. If seized, boiling water may help move them. The core of the exhaust seacock can be tapped free from below with a large brass drift. The small inlet seacock is more of a problem having a strainer fitted, restricting external access. Heat may be required. If so, see the advice on removing stanchions given above.

Check that the remaining seacocks are free. These are brass gate valves and more prone to seizing than Blakes seacocks. They may need replacement. Hot water or Plus Gas may free a seized valve.

Look at the condition of the switch/fuse panel. Electricians should work and in view of the age of these boats wiring may need replacement. Wiring should be neat and securely clipped into place.

Falling head lining due to the foam insulation under the fabric degrading is common but relatively unimportant. However it is another job to be done and fairly expensive if you buy a new tailored upholstery kit. \*

Check fire fighting provision – extinguishers / fire blanket.

### **Extending the life of boat and engine**

I change my coolant (antifreeze) annually on laying-up. After an initial flush of the seawater side with fresh water, I put the old antifreeze round the seawater side for corrosion inhibition and frost protection of the heat exchanger and exhaust muffler. See Volvo lay-up advice.

I lower the mast for the winter and use it as a ridge pole for a cover. This saves all manner of weathering, keeps the boat drier below and saves the standing rigging shock loading from gusts of wind when the boat is ashore and can't give to them. The mast needs support halfway along, the stanchions removing and all projections generously padding. \* A transparent cover such as Bradshaw's allows light below and provides shelter for winter work.

### **Westerly Owners' Association**

If you buy a Westerly, remember to join the Association. You will find it a great source of advice and leads for spares and repairs. It is the World's largest yacht owners' association which speaks volumes.

\*This item has been covered by material in the Westerly Owners' Association Magazine. See the members' area of the website.

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