http://www.deadrock.co.uk/laser/used01.htm

# **Buying a Used Laser**

This guide takes you through a process for checking out a used Laser. It is essential to follow this checking order, because it deals with the fundamentals first. If the boat you're looking at doesn't pass the first few tests, there's no point in looking at the others. All the XD kit, or a new sail and spars won't make a Laser worth buying if the hull's rubbish.

There are loads of Lasers out there, so there's no excuse for buying a duff one. A seller will know this, and should be flexible unless the boat is almost new. Prices for boats less than two years old are especially firm in the Spring, when the supply of new boats is tight and demand is high.

## 1. Is it what it says it is?

The sail number is no guide to the age of a boat. Anyone can buy a set of numbers and make their Laser look newer than it actually is. I've seen someone try and sell a 25-year-old hull as a 5-year-old Laser. Check the sail number against the number on the plate at the back of the cockpit. (If it's really old, like 30 years old, there won't be a plate; the number should be moulded in the gelcoat under the bow-eye.) If the advertised sail number is higher than the hull number by more than 1000, just walk away: the seller is trying to cheat you straight off, and you may not spot less-obvious boat-pimping. Even if you like the boat and the sail is new, you'll have to replace the numbers to enter any major event. Discount the cost of a new sail from the price, because removing numbers won't do the cloth any good.

The sailor may say it's only been sailed inland by his younger sister/maiden aunt, but this may not be strictly true. Just because the boat's at Middleshire Sailing Club doesn't mean that it has spent its sailing life on a freshwater pond. Check for saltwater corrosion on the spars and seaweed on the launching trolley. If it has a trailer there's a stronger chance it's been campaigned elsewhere. And some of those maiden aunts are very tough on their boats! Never buy a Laser superstar's boat, and if it's got Youth Squad stickers check it very thoroughly for dings and repairs. Don't be suckered in by Squad stickers of any sort; everyone will know whether you've been in a squad, and if you're over 25 you'll look a right Wally unless you really are in the Senior Squad, in which case you're not going to be getting a used boat, are you?

### 2. The Hull

Look on the Laser hull as the only non-consumable item on a Laser. Everything else can be replaced at much lower cost: a complete set of new spars, foils and a sail will set you back a shade over £1400, with £420 for the XD kit. (The Harken XD kit's now cheaper than when it came out.) If you buy a well-used boat with a good hull, that's pretty much all you can be in the hole for. But if you buy a Laser with good spars, foils and a new sail, and a few weeks later the hull turns out to have a cracked cockpit and leak, it will cost you loads, and even then you may not be able to put it right.

## **Checks:**

- Mast Step: Pour water in up to the deck-level. If the water level goes down, even by a small amount, Make Your Excuses And Leave.
- Open the transom bung and smell inside the hull. A good sign is a strong smell of glass-fibre resin; it means the hull is probably still watertight. An old boat is unlikely to smell like new, but a new-ish boat that doesn't smell of GRP will almost certainly be a 'leaker'. (Sea-water inside destroys the smell very quickly.)

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- Look along the line of the gunwhale joint where the top and bottom decks meet. If there's a kink just aft of the point where the hull sits on the trolley, someone has sat on the aft part of the deck while it sat on the trolley, and bodged the repair.
- Cracks in the under-gunwhale gelcoat where the trolley sits, or any softness there, indicates that the trolley doesn't fit. It can do a lot of damage that is difficult and expensive to repair.
- Press down on the side-decks just aft of the mainsheet block. If the decks are soft, there's some de-lamination underneath.

## With any one of the above conditions, MYXAL! (see Mast Step)

- Hatch(es) next to the mast-step. Some sort of repair has been done to the mast-step. It may be OK, but be wary and drop your price big-time, even if it's been done by a professional Laser repair shop. It's easy to bodge a repair here.
- A hatch inside the cockpit, next to the centreboard slot is generally OK. It may have been put in to fix a leaking centreboard slot, or, more commonly, to re-fix the cunningham clamcleat/deck cleat block because the screws have pulled out. Hatches are useful for holding goodies, but they can leak.
- Check for cracking along the side-deck at the top of the foot-well, and all around inside the cockpit. Isolated cracks are generally OK, but if there are more, press hard against the deck and footwell around the area. If it gives, there's a degree of de-lamination. This is quite common with Lasers that have been campaigned hard by a top sailor. (Buying from a top adult helm may be good in other classes, not so great with the Laser.) If the cockpit or side-decks are very soft, it's had hard use, and will not be worth as much. Look elsewhere unless it's heavily discounted.

## 3. Other parts

#### **Foils**

Sails aside, foils are the most expensive individual parts to replace: a rudder assembly or a centreboard is getting on for £300. Be aware that there are now three types: foam sandwich, GRP and what Laser Performance call 'infused'. The foam sandwich ones are easy to repair, and older Lasers will have this type; the GRP-only ones come with newer boats, but Laser Performance is now producing a GRP blade that is injected with a foam inner under pressure, hence 'infused'. Repairs on the GRP ones are more like repairing your hull, which can be difficulty. Judge on general condition, and check for repairs to the trailing edge, especially to the tip. (If the boat comes with GRP or 'infused' centreboard, check the rear bottom of the centreboard slot for wear, as the newer centreboards are harder, and tend to wear through the fibreglass.)

## **Spars**

Laser spars are durable, but they are at their best when only 'almost new', when they've been 'work-hardened' with a bit of use. A slightly bent boom is usually a sign that the sailor uses quite a lot of vang, but it is legal and doesn't really affect its effectiveness; you will want to check it underneath for lateral hairline cracks by the forward mainsheet block. A bent mast, either a bent bottom-section or a bent top-section, is illegal for racing. You should either insist on a replacement as a condition of sale, or drop the price by the cost of a new replacement. Bent Radial bottom-sections are now common but almost impossible to straighten effectively because of the dual-sleeve construction. A bent Standard bottom-section, though rarer, will stay bent no matter what you try. A 4.7 bottom-section should be bent; they are strong enough, and the rig small enough, not to bend further.

#### **End-for-ended spars**

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On the mast top-section look for a rivet or taped-over rivet-hole a foot from the top. This means the mast has been 'end-for-ended' (i.e. the tube and fittings have been swapped round) because the mast has become bent at the old collar-point. If this is so, you are also likely to spot a slight bend near the top. Accept one of these only as a freebie, and insist on a straight, unaltered mast (or £100 price-drop) as part of the deal.

#### Sails

Sails are consumables. Expensive they may be, but they don't last long. Don't expect a new sail with an old boat, but the cloth should still feel reasonably crinkly. Check the sail is legal, especially that it has the ILCA red button. (See my pages on illegal sails.) A new-ish sail will be relatively uncreased under the cunningham eye, but if it's been used for a week at a windy championship there will be creases. I wouldn't worry about it over-much, but it's not a new sail any more. Check for repairs or replacement panels: any repair larger than a small (e.g. 6 inches) tear-patch will be illegal.

If the seller includes one of the radial-cut Standard sails with a blue Laser starburst symbol at the head, this sail is not Class-legal. It is a practice-only sail: it can not be used for racing. Nor, I have been assured, will these sails be made class-legal.

## Fancy kit: XD or whatever

XD kit: Harken vang kit and blocks are tough, and are guaranteed to be tough. The other stuff works OK, but don't pay a premium for it. Carbon tillers are a matter for personal preference. Don't be surprised if the current owner wants to hang on to his/her carbon tiller and gives you a standard alloy one. The Gorilla Tiller is heavy just where you don't want excess mass, right at the end of the boat; like the standard alloy tiller, it's only useful for selling with a boat. At least the standard tiller is light, and encourages you to be gentle on the helm. (See Steve's Boat Whisperer videos to see what I mean.)

#### 4. Do the deal

Standard part of any deal should include a top-cover that is still relatively waterproof, and a gunwhale-hung launching trolley. Only pay extra for a trailer if you want one, and check first with the manufacturer that your car can tow; not every car made nowadays can. With some cars, small ones especially, adding a towbar invalidates the manufacturer's guarantee.

## Table of Year of Manufacture v. Sail / Hull No.

The following table has been compiled from information provided by the Laser Centre, 1976 onwards, and from Dr. Laser, pre-1976. There are discrepancies in the earlier numbers that cannot be resolved so if you intend to view or buy a boat that has a Sail / Hull No. of less than 30,000 then please use this information as a guideline only. The UKLA accepts no responsibility for the accuracy of these figures and will not be held to account if any of the information is found to be wrong

Year		Sail/Hull no.
	1971	95 –718
	1972	100 - 2205
	1973	3230 - 14305
	1974	15430 – 22496
	1975	23926 - 32167
	1976	21512 - 35264
	1977	35265 - 42273
	1978	42274 - 56277
	1979	56278 -72998
	1980	72999 - 86490
	1981	86491-93254
	1982	93255 -104928
	1983	104929 -112845
	1984	112846 -118022
	1985	118023 -123688
	1986	123689 -128595
	1987	128596 -132231
	1988	132232 -136322
	1989	136323 -139659
	1990	139660 -142789
	1991	142790 -145705
	1992	145706 -148322
	1993	148323 -152360
	1994	152361-155822
	1995	155823 -158264
	1996	158265 -161382
	1997	161383 -164398
	1998	164399 -166270
	1999	166271 -168874
	2000	168875 - 171536
	2001	171537 - 173950
	2002	173950 - 176694
	2003	176695 - 179554
	2004	179555 - 182213
	2005	182214 - 185370
	2006	185371 -