

Tips to buying an old GRP GP14 – a rough guide.

OK so you have decided to buy a GP14 and you fancy a GRP boat as you believe that a glass boat is a strong boat and therefore will be fairly maintenance free.

The truth however may be some distance from that picture, all GRP boats have inherent weaknesses and as such there are some areas that you should pay particular attention to, some of the areas mentioned while not particularly difficult to put right can be time consuming and may need a pretty competent level of DIY skills.

The purpose of this document is an attempt to provide you with a guide to many of the problem areas in the early glass boats, how to repair these problems is not discussed here, rather just what to thoroughly investigate.

Always try to get the prospective boat out for a test sail.

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If something doesn't look right it probably isn't.

Hull - Outside

Forestay fitting - in particular Bourne Boats – applies to MKI MKII MKIII

The fitting has two bolts down the front of the boat that bolt through the hull horizontally into a stainless steel plate that is glassed into the hull during manufacture. However the screws that go down through the deck screw into expansion bushes and these themselves become corroded over time and will often pull out of the foredeck. Careful examination is required around the deck at this fitting. Repairing same is not expensive, but access to the underside of the foredeck is most difficult.

Port and Starboard stay chainplate anchor points – applies to MKI MKII MKIII (where stays/shrouds fit to hull inside).

It has been known for these chainplates to pull away from the hull, check for signs of repair and discolouration around chainplates, failure of this part can lead to a de-masting while sailing. Repairing this area is fairly straightforward before catastrophic failure occurs.

Rudder pintles top and bottom – applies to all GRP / FRP (particularly the bottom one).

Pintles become loose over time, could be caused by corrosion and or neglect, if the bolts become loose the holes might be expanded by movement and allow water to enter the boat, worse still the boat may have a wood strip glassed into the hull vertically inside the transom, if water enters this the wood can rot away to nothing over time weakening the transom and adding weight to the boat. The purpose behind the wood was to give a strong fixing point for the transom rudder pintles.

Elvstrom/ Andersen bailers or auto bailers – applies to MKI MKII MKIII MKIV MKIVa

Problematic, these should be checked for smooth and easy operation, have a look under the boat to ensure that when closed the bailer is flush to the hull, and there is no obvious damage to the hull around the bailer itself. Replacement of these bailers is expensive, do NOT be tempted to purchase 2nd hand replacements from an unknown source. The good news is that repair kits can be obtained.

Keel band and centreboard gasket – applies to MKI MKII MKIII MKIV

Keel band may have been removed at some time to facilitate repairs or replacement of the centreboard slot gasket, careful inspection of all the screws along the length of the band is necessary, it is not uncommon for larger longer screws to have been used,, this could result in the screws punching through to the inside of the boat allowing water to bleed in, it is of particular concern at the bow in the area of the bow buoyancy tank, which can compromise the tank and allow it to fill with water reducing the boats inbuilt buoyancy and leading to handling problems. If uncertain removal of the floorboards and a good inspection along the keel band inside the boat would reveal screw tips appearing through the hull, also check along the sides of the centreboard casing inside the hull for screw tips too.

Crazing (impact damage) and scoring of underside – applies to all GRP and FRP boats

While crazing and scoring is not pretty, so long as the scoring (normally caused by dragging up the beach) does not penetrate through the gel coat into the glass matting below it is not too much of an issue, similarly crazing where the boat has received an impact, providing the gel coat is not flaking away nor there is no evidence of blistering inside the hull at the impact site is not too much of a concern.

A boat can be happily sailed for a season with this type of damage although I would recommend addressing it over the winter lay-up.

Hull – Inside

The mast step – applies to MKI MKII MKIII

Many if not all of the older GRP boats, have mast steps in varying stages of deterioration, from soft and wet to disintegrating, a good inspection of this part is an absolute must. Mast steps cannot be purchased 'off the shelf', and have to be made from scratch. Manufacture is relatively difficult and time consuming but manageable with some basic wood working skills. As the mast step takes substantial loads a good quality hard wood or proper marine ply must be used in its construction.

Wooden seat slats or benches – applies to all boats with wood benches

The buoyancy tanks have wood blocks glassed into the underside of the buoyancy tanks to facilitate the fixing of the benches by screwing down through the top of the tank into same. The side benches should be absolutely solid in position with no up and down or side to side movement apparent. It is not uncommon for the fixing screws to become loose over time allowing water to ingress into the wood softening and eventually rotting same. And the fixing lost. Evidence of movement in the seat slats could be serious trouble, and repairing the internal fixings is difficult and time consuming. Also could be a source of water penetration into the buoyancy tanks.

Thwart – applies to all boats with wood thwart

The thwart is fixed by screws down through the centreboard casing and at its ends by screws down into wood glassed into the underside of the buoyancy tanks, the fixing screws at the thwart ends are underneath the seat slats themselves and as such are not visible, the thwart should be solid at both its ends and across the centreboard, any movement in the thwart could be indicative of a larger problem, this section is relative to the subject matter in the previous section.

Centreboard casing – applies to MKI MKII

The casing in the glass boats is not part of the hull moulding, it is manufactured separately and

added to the hull at the assembly stage, careful inspection along its base where it is bonded to the hull is required, the finish should be smooth and not discoloured any evidence to the contrary or a build up of glass fibre in this area may indicate previous problems, ideally the boat should be turned on its side and the area just inside the slot gasket inspected too.

there is also wood bonded into the casing during its manufacture, the wood is in the front and rear of the casing and its purpose is two-fold, firstly to provide extra stiffening, and secondly to provide adequate strength for screwing on of cleats and fixings, any holes without fixings in these areas could permit the ingress of water into same resulting in the wood softening and loss of stiffness in the structure. Similarly any cracking in the gel coat can have the same result, though to be fair the centreboard case is not normally a source of trouble.

Buoyancy tanks – applies to MKI MKII MKIII MKIV

There is a known problem with the port and starboard buoyancy tanks, the floorboards in the boat rest on the hull next to and along the base of the tank, downward pressure from crew and helm eventually stress the floor/tank join so much that adhesion is sometimes lost allowing water to 'bleed' into the side tanks, careful inspection along the bottom of the tanks where they meet the floor is required, while not difficult to rectify it can be a messy job.

Stern Buoyancy tank – applies to early glass boats MKI

While the stern tank itself has no known problems, it is worth mentioning here that the tank itself makes getting water out of the boat after a capsize most difficult due to not having transom scuppers.

Floorboard turnbuckles – applies to MKI MKII MKIII

The little brass fittings that turn to hold the floorboards down are known as Turnbuckles. these in turn are fixed by a single screw down through its centre into what looks like a little fibreglass pyramid glassed into the floor of the boat, the core of this 'pyramid' contains wood, should the screw become loose water penetrates the wood softening same and eventually rotting it and the fixing is lost, total replacement of the 'pyramid' is required to rectify. Not a difficult job to do but it is time consuming.

The pyramid also doubles as a spacer helping keep the floor boards up of the hull of the boat.

Centreboard Hinge Bolt – applies to GRP & FRP where fitted

The centreboard bolt itself is normally either brass or stainless steel and as such doesn't in itself usually present a problem, where however the problem does arise is in regard to the bolt sealing washers, these washers do become old and perished, turning hard and brittle then ceasing to function properly, an old washer will allow water to enter the boat, the good news is proper sealing washers are readily available from most on-line chandlers.

The fibreglass of the casing itself can suffer from elongation and or fracturing of the gel coat at the bolt hole, this is a much more serious problem and close inspection of this area is required.

Centreboard

In most older boats most centreboards are made from laminated wood, however some boats may have plywood centreboards, we now know that plywood centreboards are NOT strong and can in certain instances snap during heavier sailing conditions.

It is recommended to get the prospective boat onto her side and get the centreboard down to give it a good inspection, any problems with the board are pretty much evident during a visual inspection.

Rudder – all GRP & FRP

Known problems with the rudder and stock include poorly fitting uphaul and downhaul lines, incorrect screws used in the pintles (pintles loose) which in turn makes locating/removing the rudder problematic, poorly fitting tiller and loose blade to stock (causing excessive movement at the tiller when sailing, resulting in poor directional control).

Centreboard casing capping – applies to generally MKI MKII MKIII

There are no known issues with this component of the boat but the capping should be solid with no movement, particularly in light of the fact that many of the early boats are transom sheeters and if you want to convert to centre sheeting then the capping must be capable of taking the load. Close inspection will reveal any obvious problems.

Foredeck support beams – MKI MKII MKIII

Early fibreglass boats have two to three wooden strips glassed onto the underside of the foredeck, a visual inspection must be carried out in this area as often the foredeck may appear to be very flat with no curve to it, usually caused by excessive weight being applied to the foredeck at some point (usually children playing pirates) and the support strips having collapsed, it is possible to repair or replace the beams but it is a difficult and time consuming job.

Rigging, Mast, Boom, Sails

Forestay, shrouds, eyes and Mast – all MK's

The wire rigging should be inspected closely for signs of corrosion at the compression fitting at the eye, also any fraying of the stainless steel strands is bad news a sure sign of imminent failure of same, early IYE masts have a stainless steel fitting riveted to the mast for the shrouds and forestay corrosion where stainless steel meets alloy is a major issue and this mast fitting should be inspected closely.

The groove that the mainsail runs in should be checked to ensure that the track is parallel, and problems in the track may prevent the sail from being hoisted, the groove is difficult to repair. Fittings should be inspected very closely checking for excessive play and wear, if it doesn't feel right then it probably isn't

Boom

Not normally a problem area, however as with the mast, any and all rivets particularly where stainless steel is riveted to alloy should be inspected closely for corrosion. Also check the fit of the boom end to the gooseneck on the mast for excessive wear.

Sails – (does not apply to early cotton sails)

Should be thoroughly inspected for patches, fraying or anything that in general just doesn't look right. Many sails that are advertised as 'suitable for cruising' just aren't, sails advertised as such are normally found to be old blown out racing sails.

As a rough guide sails in good condition should have a pronounced 'crackle' or 'crunch' to them when being handled, they should also be a bit like handling thin cardboard in as much as that you get the idea that if you were to fold the material it may crack. A pretty good guide is to roll the

mainsail up then with hands about 2.5 feet apart, pick the sail up gently at its centre, the sail should pretty much support itself, if it flops down at each end like a coffee dipped digestive then its probably seen better days.

Similarly if the feel of the sails are like an old paper handkerchief that has seen one blow too many then again the sails are probably past it.

The good news is that sails are not as expensive as you might think, depending on what sail loft you choose. Also reasonable second hand sails can be picked up at local clubs.

Written by Henry Henderson

GP14-4611 Series I

GP14-11113 MkIII

GP14-12046 Series I

GP14-12756 MkIV