

'Yacht Name'



ANCHOR HOUSE
MARINE SURVEYS

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Insurance Survey Report

Sadler 32

(Yacht Name)

Hayling Island Sailing Club, Hayling Island, UK

Tuesday 19th February 2019

Prepared on Behalf of the Owner



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Summary

'██████████' is a Sadler 32 built in 1986 by Sadler Yachts, UK to a design by David Sadler. She was found to be in overall good condition for her age but some of the domestic systems require maintenance and / or updating. She appears not to have been altered from her original design. The main summary of points is as follows:

1. The topsides, deck and superstructure are in overall serviceable condition and there are some stress cracks and small areas of repair in the topsides. The internal structure where seen is clean with no evidence of any movement.
2. Hull coatings have been sanded back in preparation for new antifoul and the underlying coppercoat is still very solid. The outer bottom laminates were tested for moisture content and the resulting readings were generally in the low scale.
3. The keel is securely fitted but the joint sealant and coatings are poor and internally, no issues were noted.
4. The stern gear is in a clean and serviceable condition overall though the 'P' bracket is showing signs of dezincification.
5. The steering gear is in a clean and serviceable condition though the rudder has play present in both upper and lower connections.
6. The mast and rigging is in generally good order but some rigging shackles need the pins wired to prevent accidental unscrewing.
7. The gas hose is out of date and all seacocks require some basic cleaning / servicing.
8. The electrical system is in a serviceable condition overall, though some of the wiring requires tidying up in areas and certain navigational lights are not working.
9. The fuel system is in good condition though the flexible hose markings must conform to ISO 7840 standards.
10. The engine is in a poor cosmetic condition, though serviceable and the alternator belt is very slack. It is recommended that the engine is inspected by a 'Bukh' specialist.
11. Most of the fire extinguishers are out of date.

This is an overall tidy example of a Sadler 32 though requiring some work and with all the servicing and maintenance issues addressed, '██████████' will continue to give good service for many years.

Within this report, any issues found are graded for your information according to severity as:

"Urgent Recommendation"

Must be done urgently before re-floating and certainly before any use is made of the vessel.

"Recommendation"

Should be done at the earlier of next docking or within twelve months or such other time scale as may be specified.

"Suggestion"

For information and consideration but not particularly significant to safety at this stage.

"Note"

For information only.

'Yacht Name'

Circumstances

The survey was carried out on the 19th February 2019. '██████████' was inspected ashore at Hayling Island Yacht Club, Hayling Island. The mast and rigging were standing. The weather at time of inspection was fine and clear with light south westerly winds at 11°C. The survey was carried out on the instruction of the owner ██████████ to ascertain the condition of the yacht and produce a report for insurance purposes.

No fastenings were drawn and no paint was removed above the water line externally. One area of paint was removed below the waterline to determine coatings makeup. Moisture meter readings were taken to determine the moisture content of the hull laminate. The hull was examined externally above and below the water line and internally where accessible, elsewhere internal mouldings prevented examination. The cabin soles, bunk boards, hatches and portable joinery were removed as necessary to gain access to the interior of the vessel. The engine was not stripped, the tanks were not opened unless stated, nor their capacities checked. The batteries and the electrical systems were tested as far as practicable including interior and exterior lights. Equipment and interior fittings were tested as far as practicable.

Please note: This condition report is correct as per the date of survey stated above and as such, it cannot be guaranteed for any time after the survey was undertaken.



'Yacht Name'

Description of the Yacht

'██████' is an all glass fibre construction, round bilge, fin keel, sailing yacht. She has a raked entry and a reverse counter stern, carrying her maximum beam aft of amidships.

She was built by Sadler Yachts, UK in 1986.

The yacht's principle dimensions as supplied are set out below:

Length overall	9.60m
Length of waterline	7.32m
Beam	3.20m
Draft	1.70m (approx.)
Displacement	4.30 tonnes (approx.)
Engine	Bukh DV20 2-cylinder diesel
Fuel capacity	57 litres
Water capacity	76 litres
Stern gear	Conventional shaft
Yard no	227



<p>Hull</p> <p><i>Hull:</i> All GRP construction with raked entry and round bilge with a shallow bilge running aft to a reverse counter stern. She has a single fin keel and her maximum beam is carried just aft of midships. The hull is in good condition overall.</p> <p><i>Port Topside:</i> This is in white GRP with a faded blue, proud 'cove' line and an old coppercoat epoxy resin acts as a boot topping waterline stripe. The topside is dulled in appearance and there are various repairs to scratches and impact marks especially at midships. There is a stress crack at midships and various rub marks in places along the topside but there are no signs of any major damage or repair. There are sticker sling tags fitted showing lifting and non-lifting points.</p> <p><i>Starboard Topside:</i> This is in white GRP with a faded blue, proud 'cove' line and an old coppercoat epoxy resin acts as a boot topping waterline stripe. The topside is dulled in appearance and there are various repairs to scratches and impact marks especially at midships. There are two stress cracks, one at forward and another at aft of forward and various rub marks in places along the topside but there are no signs of any major damage or repair. There are sticker sling tags fitted showing lifting and non-lifting points.</p> <p><i>Bow:</i> The bow has areas of light repair with scratches and scuffs also present.</p> <p><i>Transom:</i> This is in white GRP and in overall good cosmetic condition, though dulled in appearance. There are some minor surface cracks in the gelcoat from the ladder attachments and some minor chips in the gelcoat in the port lower edge but there are no signs of any major damage or repair.</p> <p><i>Attachments:</i> There is a centrally located, shaped, hinged stainless steel, four rung ladder with twin securing feet. The rubber feet are degrading and there is light corrosion staining on the fixings but the installation is secure and there is a securing cord attached.</p> <p><i>Coatings:</i> The antifoul had been sanded in preparation for a new application but currently there are overpainted blue and red layers. There is an old coppercoat epoxy resin underneath and this is still hard and the top forms the boot topping waterline stripe. Where seen the epoxy is in good condition with no signs of any detachment or flaking.</p> <p><i>Gel Condition:</i> The gel was inspected and is smooth overall with no signs of any blisters, delamination, damage or repair.</p> <p><i>Hull Below Waterline:</i> Moisture readings were taken with a 'Protimeter' Aquant 2 meter at more than 100 positions over the outer bottom area and these mainly produced readings ranging from 70 – 160 which is in the low scale. The rudder skeg produced readings ranging from 120 – 170 which is in the low to medium scale. The rudder produced readings ranging from 120 – 250 which straddles the low to high scales, the highest readings coming from upper port side. The scale used is 0 – 160 (dry) / 161 – 200 (medium) / 201 – 999 (wet).</p> <p><i>Keel:</i> The iron ballast fin keel is in overall good condition though there are areas of surface corrosion in various spots. The coatings are detaching in areas all over and the keel to hull join is old and splitting in areas. Internally, the stainless steel bolts and securing plates are all sound though some do have areas of surface corrosion and there are some small pools of salt water present. All bolts are secure but it is advised to remove all water, clean off all surface corrosion from the affected bolts and preserve with 'Tectyl' or similar. After each trip out, the bolts should be monitored for any new ingress of water.</p>	<p>Recommendation Repair all stress cracks and topside defects.</p> <p>Recommendation Replace the tags where the shaft is with 'do not lift here' labels.</p> <p>Recommendation Remove all bilge water, allow to dry out and monitor regularly.</p> <p>Recommendation Dig out the old sealant and reseal after inspection. Clean off all keel bolt corrosion, preserve and regularly monitor for any recurrence.</p>
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Fig.1 – keel bolt and securing plate showing surface corrosion.

Cathodic Protection

Anodes:

There is a spherical anode for the shaft but this had been removed at the time of survey.

Bonding:

The bonding could not be tested.

Wastage:

The anode is heavily wasted and should be replaced with twin types to increase protection as long as this does not impede water flow.

Hull Openings and Fittings

Sea Water Coolant Inlet:

The engine coolant inlet is located aft of midships on the port side and is a secure, 22mm bronze fitting in good condition. Internally, this is fitted to a secure, bronze bodied integral seacock and strainer unit which is showing all over but light surface corrosion. The rotary handle is tight to rotate.

Toilet Inlet / Outlet:

- The toilet inlet is located forward of midships on the port side and is a secure 14mm bronze flush fitting in good condition. Internally, this is fitted to a 'Blakes' bronze body seacock which operated satisfactorily but showing some areas of light surface corrosion.
- The toilet outlet is located forward of midships on the port side and is a secure 30mm bronze flush fitting in good condition. Internally, this is fitted to a 'Blakes' bronze body seacock which operated satisfactorily but showing some areas of light surface corrosion.

Grey Water Outlets:

- The galley sink outlet is located aft of midships on the port side and is a secure 14mm bronze fitting in good condition. Internally, this is fitted to a secure, bronze bodied, rotary valve seacock which operated satisfactorily but showing signs of surface corrosion in areas.

Urgent

Recommendation

Replace the shaft anode with a twin set up..

Recommendation

Clean off the corrosion, protect and monitor the seawater inlet for any worsening.

- The heads sink outlet is located forward of midships on the port side and is a secure 14mm bronze flush fitting in good condition. Internally, this is fitted to a 'Blakes' bronze body seacock which operated satisfactorily but the base is showing all over light surface corrosion.

Bilge Outlet:

Located aft on the starboard topside is a secure plastic fitting for the electric and manual pump outlets.

Exhausts:

- Located aft on the port topside above the waterline is a secure 42mm bronze exhaust skin fitting. This is showing signs of light all over surface corrosion and the fitting to hull sealant is dry and cracking.
- Fitted through the port side of the stern is a chromed heater exhaust fitting and this is secure.

Cockpit Drains:

The cockpit drains via two deck drain holes outboard aft exiting through the via secure, flush fitting 32mm bronze fittings. Internally, these drain via single clipped clear hose through 'Blakes' seacocks which are tight to turn but in a generally clean condition.

Scuppers:

The decks drain directly overboard through the toe rail gaps and aft of both side decks.

Tank Vent:

There is a circular fitting on the aft face of the cockpit port side coaming serving the fuel tank.

Transducer:

Located at the forefoot on the centreline is a rubber fitting housing the speed log of which the wheel was located up and inside the housing.

Stern Gear

Propeller:

The propeller is a right hand turning, two blade fixed type of all bronze construction and is in good condition, though no serial number was noted.

Shaft:

The propeller shaft is of 25mm stainless steel and this rotated satisfactorily when turned by hand.

Securing Arrangement:

This consists of a castle nut which is securely fitted but there is no split pin present and one of the nut lugs has broken away.

'P' Bracket:

This is in bronze and coated but where scraped away, it was seen the unit has dezincification.

Cutlass Bearing:

There is no detectable play in the cutlass bearing.

Stern Tube:

The stern tube runs through the stern post moulding with an external bearing housed in bronze but this could not be seen.

Stern Gland:

The mechanical seal type stern gland with grease lubrication is in a serviceable condition but should be monitored for any potential leaks and serviced at the next annual maintenance period.

Coupling:

The rigid coupling is serviceable but has all over surface corrosion.

Recommendation

Replace the castle nut and add a split pin.

Recommendation

Service the stern gland at the next service ashore.

<p>Steering Gear <i>Mechanism:</i> The GRP rudder is turned via a tiller arm which was not connected at the time of survey.</p> <p><i>Stock:</i> This is in 32mm stainless steel and accessible in only a very few places.</p> <p><i>Rudder:</i> The rudder is an unbalanced, skeg supported, GRP type. There are no signs of any damage or repair. The moisture readings were mainly in the low to medium scale but a handful were in the lower end of the high scale around the port upper side.</p> <p><i>Bearing:</i> The rudder upper and lower connections have medium play present.</p> <p><i>Rudder Trunk / Gland:</i> The stock runs in a GRP trunk joining the underside of the deck and the inside of the hull. Where seen, the join is good with no leaks noted.</p> <p>Deck and Superstructure <i>Deck:</i> The deck is in blue pigment GRP with a non-slip surface and there is a stress crack at the deck and superstructure join port aft and stress cracks around the starboard forward stanchion and cleat area. There are stress cracks in the chain locker around the hinges. There is also a small stress crack noted on the inside face of the chain locker on the starboard side. The surface is generally dulled but there are no signs of any major damage or repair.</p> <p><i>Superstructure:</i> The superstructure is in blue and white GRP with non-slip moulded panels on the horizontal surfaces. There is a small stress crack on the saloon deck hatch moulding, outboard on the starboard side and various small gelcoat chips, some with touch up paint but there are no signs of any major damage or repair.</p> <p><i>Hull Deck Joint:</i> This was accessible in only a few places and the deck is laid over the hull, sealed to the hull inward flange and bolted through via the aluminium toe rail. Where visible, there were no signs of any movement.</p> <p><i>Inner Tray:</i> There is an inner GRP deck tray matrix bonded to the hull throughout the accommodation, incorporating the wooden floor sections and all sole boards. This is in good condition overall with no signs of any movement.</p> <p><i>Floors / Stiffening:</i> There are partial fore and aft bulkheads bonded to the structure as well as transverse floors and stringers bonded as part of hull throughout the yacht and where seen, there were no signs of movement.</p> <p><i>Bulkheads:</i> The main bulkheads are in marine ply and bonded to the hull and where seen, these are clean with no signs of any movement.</p> <p>Hatches, Windows and Port Lights <i>Main Hatch:</i> The main hatch consists of a two acrylic washboards, the top one being vented, located within teak supports. This locks to a GRP sliding top hatch running on aluminium runners and the operation is smooth.</p> <p><i>Fore Hatch:</i> There is a 480mm square, aft hinged, painted aluminium framed fore hatch with heavily crazed acrylic glazing securely fitted over the forward cabin. The lid has a good seal and has two internal rotary handles but the glazing to frame sealant and the frame to deckhead sealant is poor which is also showing signs of leaks or condensation runs.</p>	<p>Recommendation Repair all deck and superstructure defects.</p> <p>Recommendation Replace all hatch glazing and sealant to ensure there are no leaks</p>
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Windows:

There are six windows, three per side (S, M & L) securely fitted through the coach roof moulding. These are aluminium framed and fixed through from the outside with some minor cracking from the screw heads seen. The acrylic glazing is serviceable but the external sealant is dry and cracking in areas, some with moss evident. The internal seals are generally poor and these show evidence of leaks / condensation runs.

Additional Hatches:

There is a 480mm x 340mm rectangular, forward friction hinged, painted aluminium framed fore hatch with heavily crazed acrylic glazing securely fitted over the saloon. The lid has a good seal and has two internal rotary handles but the glazing to frame sealant and the frame to deckhead sealant is poor which is also showing signs of leaks or condensation runs.



Fig.2 – poor hatch to deck head sealant showing leaks.

Hand Rails and Stanchions

Pulpit / Pushpit:

There are 25mm diameter stainless steel tube pulpit and pushpit installations and all are securely fitted.

Stanchions:

There are 8 x 25mm port and starboard stainless steel stanchions securely fitted into anodised aluminium deck sockets and these are in good condition overall.

Guardwires:

There are 4mm upper and 4mm lower 1 x 19 stainless steel guardwires secured and tensioned from the pulpit by cord lashing.

Handrails:

- There are 2 x weathered teak handrails securely located either side of the coach roof.
- There are 2 x wooden handrails located at the saloon steps and these are securely fitted.
- Internally, there are wooden handrails securely fitted to the outboard deckhead on both sides and these are secure.

Ground Tackle and Mooring Arrangements

Anchor:

There is a galvanised steel, 25lb 'CQR' anchor with hinged fluke section located at the bow. This has heavy surface corrosion and is painted. The connecting shackle is corroding but is wired against accidental unscrewing.

Chain:

The main anchor cable is a length of 10mm galvanised steel chain in a serviceable condition where seen. The chain bitter end could not be seen attached to a secure high point but the owner stated that the chain is 20m in length, spliced to a 30m length of rope which is secured to the chain locker base.

Windlass:

There is a Simpson and Lawrence' manual, horizontal windlass with cable gypsy only securely fitted in the chain locker. The chain leading in to the windlass is showing surface corrosion.

Stem Head:

There is a stainless steel stem head and integral chain plate securely mounted at the bow with single nylon roller. The under bedding sealant is dry and cracked.

Cleats:

There are 4 x 260mm and 2 x 200mm anodised aluminium mooring cleats securely fitted by the toe rail.

Mast, Spars and Rigging

Mast:

The 'Selden' anodised aluminium mast is in a serviceable condition as seen from the deck with serviceable fittings. The mast and rigging was given an overall inspection in 2018 as part of the forestay replacement.

Boom / Kicker:

- The 'Selden' anodised aluminium boom is in a serviceable condition with a securely pinned and secured bracket. The bracket base split pin needs to be opened out.
- The 'Main' block and rope rodkicker is in a serviceable condition but the mast foot tensioner shackle pin is not wired to protect from accidental unscrewing.

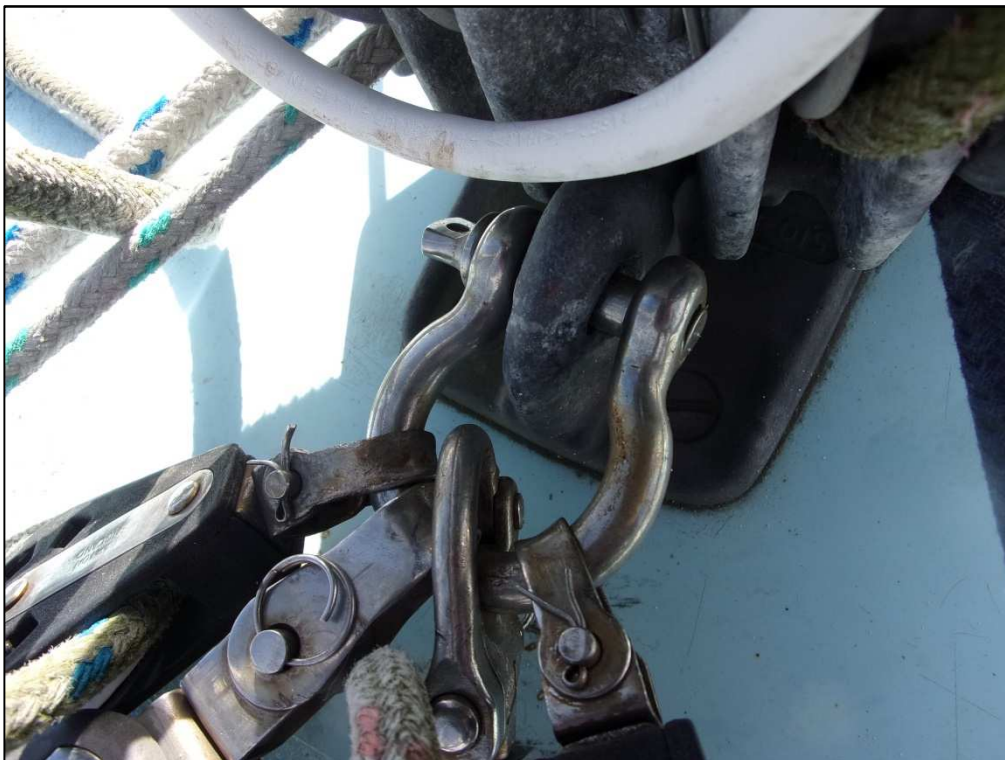


Fig.3 – main shackle securing pin not wired against accidental unscrewing.

Recommendation

Consider blasting the anchor back to clean metal and preserve. Add a new securing shackle with wired pin.

Recommendation

Remove all chain and inspect for serviceability.

Recommendation

Ensure all rigging shackle pins are wired against unscrewing.

<p><i>Foot / Step:</i> The mast is deck stepped on a reinforced coach roof moulding. The mast is securely pinned and fitted to the aluminium casting which in turn is securely screwed to the coach roof.</p> <p><i>Spreaders:</i> The single pair of aluminium, perpendicular spreaders are securely pinned into sockets riveted to the mast when viewed from the deck.</p> <p><i>Stays:</i></p> <ul style="list-style-type: none"> • The forward stay is a recently fitted 'Furlex' 204S furling system type, which is in a serviceable condition and securely pinned and fitted to the stem head. • There is a baby forestay of 7mm 1 x 19mm stainless steel wire and is securely fitted to the coach roof forward. • The aft stay is a single 7mm 1 x 19 stainless steel wire fitted to a rotary tensioner which is secure. <p><i>Shrouds:</i></p> <ul style="list-style-type: none"> • The cap shrouds consist of 7mm 1 x 19 stainless steel wire. All are in good condition and suitably tensioned. • The lower shrouds consist of 8mm 1 x 19 stainless steel wire. All are in good condition and suitably tensioned. <p><i>Rigging Screws:</i> The various open, stainless steel bottlescrews appear in good serviceable condition and are pinned but not taped. The bases are securely pinned to the deck plates and the caps have nylon protective covers installed.</p> <p><i>Chain Plates / Reinforcements:</i> All deck, chain plates and reinforcements for stays are in stainless steel and where visible all were seen to be sound and secure with no evidence of any movement. The shroud reinforcements are all hidden behind cabinetry linings and could not be inspected.</p> <p>Gas and Domestic Installation</p> <p><i>Locker / Cylinder(s):</i> This is located in the cockpit starboard aft locker but did not contain any cylinders at the time of survey. The owner did connect a small camping stove cylinder for the purposes of testing the cooker. The locker drains through a gap in the locker lid base and any future cylinders must be secured from any movement.</p> <p><i>Regulator / Hose:</i></p> <ul style="list-style-type: none"> • The regulator is secure and serviceable though not dated and showing some light surface corrosion. • The orange gas flexible is BS 3212 compliant with no signs of cracking visible but dated 01/2011 and therefore requires replacement. <p><i>Gas Pipe / Cut Off Valve:</i></p> <ul style="list-style-type: none"> • The pipe is in drawn and where visible is showing signs of surface corrosion in areas. • There is a manual cut off valve to the cooker located behind the cooker and this is operable but the copper pipe fixings are showing signs of surface corrosion and the braided hose appears old. <p><i>Cooker:</i> There is a 'Flavel' Vanessa stainless steel oven / grill with two hob burner located in the galley on the port side aft. This is securely gimballed, clean and serviceable and was tested satisfactorily at the time of survey.</p> <p><i>Heater:</i> Located in the cockpit port locker is an 'Eberspacher' diesel heater and this is not working / disconnected and is showing surface corrosion to the body and some visible internal parts. This is due to the stowage of wet ropes / fenders which as they dry out, the moisture attacks the local metal components and so should be moved to a dry area.</p>	<p>Recommendation Remove all corrosion and corroded fittings, clean up, protect and monitor regularly for any water ingress.</p> <p>Recommendation Ensure the baby stay base connection is secured against accidental freeing.</p> <p>Recommendation Replace the flexible hose, clean up all connections and consider replacing the cooker braided hose.</p> <p>Note Gas systems and appliances must be maintained and or checked by a suitably qualified gas engineer conversant with the requirements of BS 5482 Part III.</p> <p>Recommendation The heater must be removed to a drier location away from lockers that store wet ropes / fenders.</p>
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Sewage and Bilge Pump Installations

Pipework:

The grey and black water pipework installations are as follow:

- Grey water – reinforced clear hose and securely single / double clipped.
- Black water – reinforced clear hose and securely single clipped.

Electric Bilge Pump:

There is a 'Rule' 500gph automatic bilge pump located in the engine compartment bilge and this operated satisfactorily when manually switched from the 12V panel.

Manual Bilge Pump:

There is a 'Patay' manual bilge pump securely located aft in the cockpit port side locker. The pickup is securely fitted in the engine compartment bilge.

Pipework:

The pipework is run in a mixture of reinforced and clear hose, securely clipped and the various runs combine via 'Y' piece to discharge through the starboard topside aft.

Electrical Installation

Batteries:

There are three batteries on board dealing with engine start and domestic systems:

- 1 x 12V 75Ah engine start battery located in the starboard aft bunk base.
- 2 x 12V 86Ah domestic batteries located in the starboard aft bunk base.

The main batteries are indicating charged, securely fitted / supported via wooden chocks. All terminals are clean and secure.

Isolators:

Located on the outboard face of the engine compartment on the starboard side is a rotary 1-2-All-Off isolator and this is operable and secure.

Charger:

Securely fitted below the chart table is a 'Sterling Power Products' ProCharge Ultra charger of 12V 20A but this could not be tested as no shore power was available.

Shore Power / RCD Unit:

There is a fixed shore power plug inlet connected to an 'MK' consumer / RCD unit fitted on the starboard aft cabin aft bulkhead. As no shore power was connected this could not be tested.

Panel:

The 12V DC switch panel is located above the saloon steps and is well laid out and was operable at the time of survey.

Wiring:

Where visible, the main wiring is serviceable but there are areas where this is untidy, such as wiring going to the middle locker under the starboard aft bunk where wires are being crushed by the bunk sole board.

Lights:

There are various switched lights throughout the accommodation. All operated satisfactorily apart from the forward cabin starboard and saloon starboard forward units.

Navigation Lights:

There are pulpit mounted port and starboard navigation lights, a pushpit stern light, a mast based deck light located half way up and a tricolour light. The pulpit navigation lights and the mast based deck light are not operable.

Fuel Installation

Deck Filler:

There is an anodised, screw type deck filler securely fitted through the port side of the cockpit coaming. The seal is dirty / poor and there is no securing chain.

Recommendation

Ensure all wiring is neatly clipped, secured to surrounding bulkheads and free of any restrictions.

Urgent Recommendation

Ensure all navigation lights are operable.

Tank:

There is a stainless steel tank located forward in the port side cockpit locker. This is securely fitted with no leaks noted. The inlet and vent hoses are in clear hose, securely single clipped but not in ISO 7840 compliant hose.

Fuel Shut Off Valve:

There is a single and operable fuel cut off valve for the engine fuel line but located underneath the tank where access is almost impossible. The diesel heater take off is very corroded and no shut off valve was noted.



Fig.4 – the fuel tank cut off valve is very inaccessible in an emergency.

Distribution:

This is simple and serviceable and is in accordance to good engineering practice where seen.

Pipework:

The pipework is in overall good condition where seen but the flexible hoses are not marked ISO 7840 compliant where seen.

Pre-filters / Filters:

There is a 'Vetus' double fuel / water separator with drain taps securely located to port in the engine compartment. The installation is secure but the filter bodies have light surface corrosion present.

Machinery

Engine:

The engine details are:

Make	Bukh DV20 2-cylinder diesel engine
Max rating	20hp @ 3,000 rpm (approx.)
Serial no	108049
Engine hours	n/a

The engine is in poor cosmetic condition overall and there are areas, especially on the aft end, that have heavy surface corrosion and salt deposits present. There are components under the manifold that have heavy surface corrosion present and it is advised to have the whole engine and gearbox assembly inspected and serviced by a 'Bukh' specialist.

Urgent Recommendation

All fuel hoses including inlet and vent hoses must be ISO 7840 compliant.

Recommendation

Move the shut off valve to an easily accessible area.

Urgent Recommendation

Ensure all flexible fuel hoses are ISO 7840 compliant.

Recommendation

Have the engine and gearbox installation fully inspected and serviced by a 'Bukh' specialist to ensure the engine remains in a serviceable condition.

Gearbox:

The gearbox unit is in a poor cosmetic condition and details are:

Make	ZF
Ratio	2.47 (F) / 2.36 (R)
Serial No	8890030002



Fig.5 – Bukh DV20 2-cylinder diesel engine.

Bearers and Mounts:

The engine / gearbox unit is firmly secured to lengthwise strong GRP beams via four engine mounts. These are in poor condition overall with heavy surface corrosion on the mount bodies and the engine block connections and whilst there is no detectable movement of the engine, the mounts should be cleaned up, further inspected and preserved / monitored for any worsening.

Strainer:

This is integral to the cooling water seacock.

Hoses:

These are mainly braided types and single clipped. The hoses are serviceable where seen but should be further inspected as part of an overall engine inspection.

Cooling:

The engine is cooled directly by seawater supplied by an engine driven impeller type pump which is serviceable but has signs of some surface corrosion and some deposits present. The block has heavy corrosion underneath the pump suggesting either a present or old leak.

Lubricant:

- The engine oil is semi-carboned, viscous and at full level on the dipstick.
- The gearbox oil is clear, viscous and at full level on the dipstick.

Fluid Tight:

There are no signs of any major leaks from the engine but there is some oily water in the bilge.

Ancillaries:

The engine is fitted with a 12V alternator which supplies charge to the yacht's batteries when the engine is running but the belt is very slack / loose.

Recommendation

Clean off all mounts and reinspect. Preserve and monitor regularly.

Recommendation

Clean off the corrosion on the engine block under the water pump and monitor the pump for any leaks during operation.

Recommendation

Resecure the belt with correct tension.

Recommendation

<p><i>Exhaust:</i> The exhaust gases from the engine travel through the manifold and riser to a double clipped, black reinforced marine grade rubber hose fitted to a 'Vetus' water lock which runs aft where it is looped up and connected securely to the exhaust fitting via a 'Vetus' muffler. There is strong surface corrosion on the manifold and exhaust outlet and it is advised to replace the exhaust outlet as part of a wider engine installation inspection.</p> <p>Fire Fighting Equipment</p> <p><i>Accommodation:</i></p> <ul style="list-style-type: none">• There are 2 x 1kg ABC, dry powder extinguishers showing fully charged and dated 2016 located at the chart table and in the cockpit port locker by the fuel tank.• There is a 1991 dated unit located in the forward starboard hanging locker. <p><i>Galley:</i> There is a 'Plastimo' fire blanket located at the galley.</p> <p><i>Engine Room:</i> There is a 1kg clean agent extinguisher located aft in the engine compartment dated 2011 and showing sign of corrosion on the body.</p> <p><i>Smoke / CO Alarm:</i> None seen at time of survey which but this is recommended for all vessels with a gas installation.</p>	<p>Clean off all corrosion and deposits around / on the manifold and monitor for any worsening.</p> <p>Urgent Recommendation Replace all out of date extinguishers (5 year useful period) and install smoke / CO / gas alarms.</p>
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'Yacht Name'

Statement

This report is a true and accurate description of '██████████' as far as could be ascertained at the time of the survey, but no guarantee is given or implied. We have not inspected equipment, woodwork or other parts of the structure which are not included within this report or were covered, unexposed or inaccessible and we are therefore unable to report that any such part is free from defect.

The owner should satisfy themselves that all systems which could not be tested or inspected at the time of survey are operable.

The yacht has not been examined for compliance with any code, rule or craft directives and no opinion as to such compliance is expressed or implied.

This report is provided for the sole use of the instructing client named within this survey report and no liability of any nature will be accepted by the surveyor to any third party.

This report is submitted without prejudice.



Rupert Keyzar
AssocIIMS

Anchor House Marine Surveys
26th February 2019

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