Skipper's Manual

Sailing Yacht "Hanse 342"

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1. General

1.1 Introduction

This Manual is to help you handle your sailing yacht safely and with pleasure. It contains major information about the yacht, safety instructions on handling and information regarding care and maintenance.
Please read this Manual carefully and acquaint yourself with your watercraft before leaving for your first voyage.
For your own safety and convenience, should this be your first watercraft or should you have changed over to another type of watercraft with which you are not yet acquainted so much, please acquaint yourself with the handling and operation of this watercraft before taking charge. Your trader or national sailing or motor boat association or yacht club will be pleased to inform you of local yachting schools or recommend you the names of experienced trainers.

PLEASE KEEP THIS MANUAL IN SAVE PLACE AND HAND IT OVER TO THE NEW OWNER WHEN SELLING THE YACHT.

Certification

The EC Directive provides for certification module **Aa** for yachts of this size. This means the manufacturer himself certifies that construction and equipment comply with the Directive, however stability and flotation need to be verified by a recognised test body.

Lloyd´s Register Quality Assurance GmbH – Yacht Services (a 100 per cent subsidiary of **Lloyd`s Register of Shipping, London)** with head office in Hamburg, the accredited test body in compliance with the EC Directive (see Declaration of Conformity), is authorized to do this verification.

1.3 Design Category

The sailing yacht Hanse 342 is classified as design Category A.
The Directive describes Design Category A as follows:

Design Category A: Ocean
Designed for extended voyages where conditions may exceed wind force 8 (Beaufort scale) and significant wave heights of 4 m and above, and vessels largely self-sufficient.

1.4 Identification

The hull identification number is imbedded into the transom on starboard side. It is a globally unique sequence of numbers and letters.
Another number is imbedded at a hidden place which is only known to the manufacturer. In case of theft it will help to identify your yacht.
The number is:

1.5 Builder's Plate

The builder's plate of the yacht is on the front wall of the cockpit.

Explanations

Boat design category A: Ocean

Max. = 8 = 600 kg:
Maximum number of persons recommended by manufacturer if boat is underway in the relevant sea according to its design category. If the boat is underway in non-ocean areas the number of persons may increase taking into consideration the maximum additional loading capacity.

Max. + = 1100 kg:
Maximum loading capacity comprising 8 persons, stock, supplies and personal equipment, including tank capacities.

CE 0525:
CE-mark to proof conformity of the boat with the provisions of the Directive. The sequence of numbers is the identification number of the certifying body, in this case **Lloyd's Register Quality Assurance GmbH**.

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EU - Konformitätszertifikat

Lloyd's Register Quality Assurance GmbH, eine Benannte Stelle im Sinne der EG-Richtlinie 94/25/EG für die Sportschiffahrt, hat die Berechnungen des Herstellers und/oder die Kontrollen für die Stabilität und des Auftriebs entsprechend den grundlegenden Sicherheitsanforderungen 3.2 und 3.3 für die Boot-Entwurfskategorie A im Hinblick auf das Boot wie unten beschrieben überprüft, und bestätigt, daß diese grundlegenden Sicherheitsanforderungen in Übereinstimmung mit dem Modul Aa der obigen Richtlinie zufriedenstellend erfüllt wurden.
Die benannte Stelle war nicht in Produktionskontrollen einbezogen wie evtl. angenommen werden könnte, wenn die EU-Kennummer neben dem CE-Kennzeichen erscheint.

Dieses Zertifikat ist ausgestellt für:

Antragsteller	:	**Yachtzentrum Greifswald GmbH & Co. KG** **Salinenstr. 22** **17489 Greifswald**
Bootstyp	:	**Segelyacht mit festem Kiel "Hanse 341"**
Modul	:	**Aa**
Rumpflänge	:	**10,35 m**
vom Hersteller empf. max. Zuladung	:	**1.000 kg (ohne Tankinhalte)**
max. Personenzahl	:	**8**
Hersteller	:	**Yachtzentrum Greifswald GmbH & Co. KG** **Salinenstr. 22** **17489 Greifswald**
Spezifizierte Normen	:	**prEN ISO 12217-2, prEN ISO 14945, prEN ISO 14946, prEN ISO 11812, prEN ISO 15083**
Zertifikat-Nr.	:	**HYS 0130079**
Ausstellungsdatum	:	**18. Oktober 2001**

LLOYD'S REGISTER Lloyd's Register YACHT-SERVICES HAMBURG QUALITY ASSURANCE GmbH

LRQA GmbH
EU-Kennummer: 0525

Name:
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W. Scheel

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Lloyd's Register Quality Assurance GmbH ist eine Tochtergesellschaft der internationalen Klassifikationsgesellschaft Lloyd's Register of Shipping, registered office: 71 Fenchurch Street, London EC3M 4BS.

1.7. Applied Standards

Applied harmonised standards and/or draft standards relating to the paragraphs of Directive 94/25/EC.
(Please note: Sections of the standards containing requirements for the Manual were not applied or applied only in part.)

EC Directive	Standards
1. Main dimensions	8666
2.1. Hull identification	10087
2.2. Builder's plate/number of persons	14945
2.3. Protection from falling overboard	15085
3.1. Structure	12215-1, -2, -4, -5
3.2. Stability and freeboard	12217-2
3.3. Buoyancy and flotation	12217-2
3.4. Openings in hull	12216; 9093-1
3.5. Flooding	11812; 12217-2; 12216; 28849; 15083
3.6. Maximum recommended load	14946
3.7. Liferaft stowage	Sicherheitsrichtlinie des DSV (Safety Directive of German Sailing Association
3.8. Escape	9094-1, 12216
3.9. Anchoring, mooring and towing	15084
4. Handling characteristics	8665; 11592
5.1. Inboard Engines	16147
5.2. Fuel system	7840; 9094-1; 10088
5.3. Electrical system	10133; 13297; 28849
5.5. Gas system	10239
5.6. Fire protection	9094-1
5.7. Navigation lights	KVR (International Regulations for Preventing Collisions at Sea)
5.8. Discharge prevention	8099

1.8 Warning Notices

Stands for the existence of an extreme, real source of danger, which is very likely to cause death or irreparable injury should no appropriate measures be taken.

Stands for the existence of a source of danger, which may cause injuries or death should no appropriate measures be taken.

Stands for a reminder of safety precautions or raises the attention to handlings, which may be unsafe or may lead to personal injuries or damage to the craft or its components.

We give you here valuable advice to facilitate the handling of the watercraft or parts of it.

2. Description of the Boat

For the general description of the yacht please see the standard specification and the relevant contract specification.

2.1 Principal Dimensions

Length of the hull	L_h	approx. 10.35 m
Length of the hull at the water line	L_{WL}	approx. 9.20 m
Beam max.	B_{max}	approx. 3.40 m
Draught, lifted	D_{max}	approx. 1.05 m
Draught, lowered	D_{max}	approx. 2.00 m

2.2 Light Weight, Maximum Number of Persons and Additional Load

Light weight standard keel	m_{LCC}	approx. 5390 kg
Light weight short keel	m_{LCC}	approx. 5460 kg

Maximum number of persons	8	600 kg
Additional load, total		1,100 kg

The mass of the additional load covers the masses of the equipment which is not covered by the light weight, in particular, tank contents, stock, loads, equipment such as life rafts and dinghies.
In case of ocean cruises over several days no more than 8 persons should be on board.
No more than 12 persons should be on board for day cruises for whom is sufficient room on deck and in the cockpit.

The stability criteria of the yacht are designed for the determined masses and the arrangement and accommodation of additional load in compliance with the regulations.

2.3 Motorization

For further information see operating instructions for the engine and contract specification.
The maximum rated engine power of the HANSE 342 is 35 hp / 26 kW.

Please take note of the operational instructions for the engine system and the remarks regarding its operation, maintenance and care.

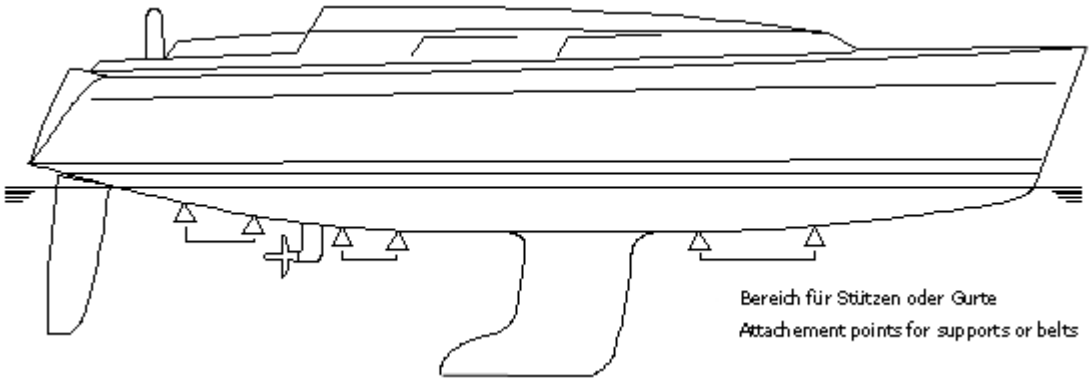
2.4 Electrical System

The yacht is furnished with an electric 12 V direct current system. A 230 V AC system is a possible option.
For relevant information see the operating instructions as well as the contract specification.

2.5 Tank Capacity

1 fresh water tank	approx. 240 l,
1 fuel tank	approx. 80 l,
1 sewage tank	approx. 40 l.

2.6 Attachment Points for Lifting Gear, Support Points for Transport



(Graphic representation does not correspond to the make of the boat)

Lifting by Crane
The belts should be placed in compliance with the stability of the hull and the distribution of weight so that the watercraft is in an as much as possible horizontal position. The correct position of the belts should be marked with stickers below the toe rail.

The rear belt is near the Saildrive engine.
The belt must not be attached at the Saildrive or near it!

The stay under floating loads is forbidden!

Slipping
If the yacht is transported on shore on a conventional slipway, it can stand on the keel. In this case the position of the yacht is unstable and therefore it has to be protected from tipping over on the sides as well as the front and the back. We therefore recommend to slip the yacht in an appropriate cradle for transport and storage.
If the yacht is to stand on the keel over a longer period of time, forward and after quarters have to be supported efficiently in order to relieve the structure.
At any rate, if the yacht is stored over a longer period of time, we recommend to put it in a transport and storage cradle.

Transport
In most of the cases the same rules apply for transport as noted under the paragraph "Slipping". In addition to that the yacht must be supported at the aft and forward quarters in order to relieve its structure.
The yacht must be fastened by suitable belts.

3. Security Instructions

The sailing yacht is a state-of-the art sailing yacht which has been built with great care. However, outside events, faulty operation or other unpredictable events may cause the danger of flooding, sink the yacht or damage it otherwise.
The design of hull stability, its built-in parts and systems is such as to safely withstand the stress when moving within scheduled areas.

As a matter of fact it is not possible to take into consideration any heavy collisions with solid underwater obstacles when calculating the dimensions of the yacht. Therefore, this may cause damage.

3.1 Watertight Integrity

The watercraft has a self-draining cockpit so that breaking sea and rain are drained to the outside.
It may be necessary to close the hatches and entrances in case of danger of flooding.

In the case of extreme climatic conditions and/or harm by collisions the boat may sink from ingress of water. Under such circumstances the capacity of the bilge system may not be sufficient.

Please take note of the following:

Keep order on board so that the systems are accessible at any time!
Make the leak test with **outboard openings** and **sea valves**!
Keep the **bilge pump systems** in stand-by position!
Keep leak stopping material on your boat!
Stable **buckets** are an efficient aid for emptying the boat.
Adjust your yacht to the prevailing **weather conditions** (e.g. reef the sails)!
Close **hatches, windows** and **air drains** in heavy weather (as far as possible)!
Do not **change any technical devices** without expert advice from the shipyard!
Inspections are to be carried out regularly and expertly!
Beware of the **dangers** of touching ground or of running the ship ashore.

3.2 Stability

Stability is the property of a yacht of righting up after getting a heel from wind and/or waves. This is guaranteed when no **extreme** amounts of water are on board. The yacht gets sufficient stability by its shape, the distribution of weight, the calculation of its dimensions as well as the amount of ballast.
The yacht has a righting arm even at 90 degrees inclination in the critical case.
However, larger heeling angles can only occur at heavy weather when several forces are overlapping.

3.3 Fire Protection

Preventive Fire Protection
Fire, in addition to water, is a great hazard for any ship as well as for a sailing yacht. A plastic yacht consists of a flammable material though its flammability is very low.

Engine and cooker as well as any naked fire are major sources of fire.

Consider the following advice:

- Keep clear the ways to exits and ports!
- Do not change the safety devices such as fuel valves, gas valves, switches of electric devices!
- Do not change the positions of fire extinguishers!
- Do not leave the vehicle unattended when cooker and/or heaters are used!
- Do not use gas lamps in the yacht!
- Do not change anything on the systems, in particular not the electric, fuel and gas systems!
- Do not fill fuel tanks or replace gas bottles with running engine or if cookers and heaters are in use!
- Smoking and handling of naked flames and light are forbidden while handling fuel or gas!
- Keep the bilges clean and control at regular intervals for fuel and gas smells!

- Do not keep flammable material in the engine room!
- Do not fix any freely suspended curtains or other material in the neighbourhood or above cookers or other devices with naked flames!

The sailing yacht is equipped with two suitable fire extinguishers which allow fighting the fire efficiently from its very beginning. Add a fire blanket to your equipment. It can be most efficient near the cooker, in particular when using hot grease.

Instruct your crew in the handling of fire extinguishers!

The fire extinguishers are at the marked positions!
The yacht is furnished with two fire extinguishers, at least fire class 10A/68B.

ATTENTION!
Observe the inspection periods for fire extinguishers and make sure that they are always ready for use.

Active Fire Fight

Each fire is a direct hazard to you, the crew and the yacht!
You have to fight the fire consequently without delay immediately after having alarmed all persons on board.

Any person who cannot actively participate in the firefight has to go on deck using the escape openings and put on the personal life jacket.

A deck port is an escape hatch and must not be adjusted!

Fire in the Pantry:
- Interrupt gas supply.
- Smother the flames with a fire blanket.
- Use the fire extinguisher when the fire has spread to the equipment!

Fire in the Engine Room:
- Switch off the engine!
- Do not open the hatches!
- There is a small opening behind the companionway hatch between the stairs of the engine room. Insert the nozzle of the fire extinguisher into this opening and empty it completely into the engine room.
- Only open the engine room when you are convinced that the fire is extinguished and the room has cooled down.

Fire in other Areas
Try to fight the fire with the fire blanket or with water unless it is caused by flammable liquids. In such case fight the fire with fire extinguishers.

3.4 Protection against Falling over Board

The yacht is furnished with a circulating rail with two drafts as well as bow and stern pulpits. Handrails are arranged on the cabin top.
These furnishings guarantee a certain protection from falling over board.
A hinged boat ladder is attached at the stern for reboarding and for the rescue of persons. Familiarize yourself with the use of the boat ladder and practice reboarding, e.g. with the man-overboard manoeuvre (MOB).

It is recommended as a matter of principle to secure persons on deck with individual rescue and safety means (e.g. life jackets, safety belts).

Instruct the crew accordingly before starting a cruise!
We do not advice solo-sailing (single-handed cruising).

Life-saving Appliances

The watercraft is not furnished with life-saving appliances by the shipyard as a matter of principle. Furnish the boat with life jackets in accordance with the number of persons on board. Inflatable liferafts should be carried on board as collective life saving appliance for ocean cruises in accordance with the number of persons and be kept ready for use.

3.5 Drinking Water

Drinking water is to be filled in the inlet on deck marked accordingly (Wasser or Water).

ATTENTION!
When drinking water is stored over a longer period of time pathogens may develop. Please use appropriate licensed agents against germination!
Exchange the water at regular intervals and flush the tank!

3.6 Sea Water

Sea water is used for two circuits:
for toilet flushing
for the motor system

The sea water valves have to be closed when the boat is unattended over a longer period of time.

3.7 Waste Water (Toilet System)

The toilet system is designed in such a way that its discharge is only possible into the waste tank.
Discharge on shore is carried out through the screw-cap (marked Waste) on board.

Please note that it must be ensured in certain ports and cruising areas that no human waste can be pumped overboard (e.g. Baltic Sea Convention).
Please instruct your guests and the crew in the handling of the toilet.

When using the pump toilet please follow the symbols as well as the notes in the Manual for operating the toilet.

3.8 Fuel System

Fuel (Diesel) is to be filled through the inlet on deck marked accordingly (Diesel or Fuel).

Only fill with clean fuel (Diesel)! Inspect and clean the filter and water separators regularly!

The boat should be filled with care so that no fuel drops on deck or into the water. Have a cloth ready for excess oil.

Engine, heating and cooker must be switched off during filling.
Smoking and handling of naked flames and light are forbidden!

3.9 Electrical Systems

Please take note of the operating instructions for the electrical system and devices.
Keep a range of the relevant spare bulbs!

The main switch must not be switched off during engine operation as this will destroy the diodes of the dynamo.

The electricity is distributed from the relevant switchboards.

Please open the switchboard only when switched off because you may get into contact with live elements that are not protected by fuses.

Please note: Energy from the battery is only available for a limited time. Should it not be possible for certain reasons to recharge the batteries whilst at sea, you should save electric energy.
We recommend switching on the users according to their importance:

- only position lights at night,
- lights at the chart table only when it is used,
- navigation instruments may be in stand-by position.

The general lights should also be switched on only when directly required. You should turn off the refrigerating box, radio, autopilot or other users that require a lot of energy.

A.C. System

Please take note of the following dangers should your yacht have a shore supply socket:

Please connect the shore supply by first plugging in on board and thereafter on shore.
To cut off the connection you start by unplugging the connection on shore.
Do not allow the cable to lay in the water and plug connections should be protected from water or be watertight (rain).

For your own **safety**, the shore connection is equipped with a fault-current protective switch (FI-protective circuit breaker) which should be tested regularly for its operativeness by pressing the release button.

Safety Remarks and Warnings

- Do not modify the electric system. Only allow qualified specialists for marine electrical equipment to carry out such work!
- Only employ devices isolated twice or wired three times, if possible!
- Prevent the cable from hanging in the water! This may cause injury or death by electrocution to swimmers.
- Switch off first the switch on shore before plugging or unplugging!
- Cut off first the shore connection!
- Close the cap of the shore connection tightly!
- Do not modify the plug of the shore connection; only use compatible plugs!

3.10 Gas System

The gas system for the cooker is installed in compliance with European Standard EN ISO 10239. Please take note of the special rules prevailing in your country!

If the boat goes under german flag it is your obligation as owner to have this unit checked regularly every two years by an acknowledged expert of Deutscher Verband der Gas- und Wasserinstallateure of Germany.

Safety Instructions

Please take note of the following remarks as well as the Manuals and/or directions for use of the instrument manufacturers!

Leaking gas is more heavy than air and is compiling in the hull. DANGER OF SUFFOCATION and DANGER OF EXPLOSION! Do not use fire or naked light and/or do not use electric appliances whenever you smell gas!

Gas Smell
In the case of gas smell close the cylinder valve and ventilate the boat intensely. Prevailing gas can be detected with gas detectors.
Have the reason examined and repaired by an expert before using the gas unit again!

Operation
A gas system has to be operated with care.
When using the gas system, please observe the following order:
- Check, whether the cooker valve is closed!
- Open the cylinder valve!
- Open the valve in front of the cooker!
- Open one of the burner valves, keep it pressed (ignition lock) and light the gas!
- Keep the valve pressed down until the flame is stable!

When switching off you should observe the following order, in particular for a longer interruption:
- Close the valve on the gas cylinder, the flame dies out.
- Thereafter close the valve in front of the cooker and the burner valve.

General Notes for Operating the Gas System
- Close supply-line valves and cylinder valves when appliances are not in use. Close valves immediately in case of an emergency!
- Be sure that appliance valves are closed before opening the cylinder valve!
- Appliances consume oxygen and release combustion residues when fuel is burned. Therefore ventilation is required when the appliances are in use. Do not use the cooker for heating. Never obstruct ventilation openings such as companionway hatch or deck ventilator!
- Never obstruct fast access to the liquefied petroleum gas (LPG) unit components!
- Keep valves of empty gas cylinders closed and disconnected from the system. Keep ready for use lids, protective caps or plugs!
- Store reserve cylinders or empty cylinders on the open deck or in special rooms which are vented overboard!
- Never use the LPG cylinder housings or cylinder lockers for storage of any other equipment!
- Check tightness only with ammonia free agents and not with a naked flame!
- Do not smoke or use a naked flame when handling the gas cylinders!
- Never leave your boat unattended when LPG operated appliances are used!
- Check the hose lines of the system regularly, at least annually. Replace them if any damage is found!
- Do not use the cooker at high waves or large heel angles (unless the cooker has a gimballed suspension)!

3.11 Ventilation

NOTE **For your personal well being, ventilate the boat as often and as well as possible. Air humidity and changing temperatures may cause precipitation of moisture.**

3.12 Bilge System

Anchor locker and cockpit are self-draining. Therefore no pumps are required. The openings are to be kept free from blockages.
The yacht is equipped with a manual bilge pump and an electrical bilge pump. Their function is to be tested regularly.

WARNING **The total pumping capacity for emptying the bilges of the yacht may not be sufficient if leakage is caused by collision.**

The boat should be furnished in addition with a bucket with leash or a bailer.

3.13 Heating (optional)

Provided that your yacht has a heating (optional), please consider the relevant operational instructions.

WARNING!
Please take note of the operational instructions for the heating system and the remarks regarding its operation, maintenance and care.

3.14 Hull Openings, Sea Valves

Openings in the hull are potential dangers for ingress of water. They require your special attention.
They are manually operated, therefore their condition needs regular checking.
All underwater through-hull fittings may be closed with a sea valve. You should always close them if you leave the boat unattended for a longer period of time.
Through-hull openings for instruments, e.g. echo sounding gear, are special designs and cannot be closed by a sea valve.

Keep sea valves closed when not in use!
Test the lock state and the position of the lever.
In closed position the lever should be crosswise to hose or pipe.

You should keep on board different sizes of **leak stoppers** with a view to preventing danger. In case of damages you can quickly and efficiently close the openings with them.

3.15 Engine

NOTE **After you have started the engine, please check whether the exhaust also ejects water besides exhaust gas, also intermittently.**
If not, the cooling water supply has to be checked and repaired.

A thermostat with optical and acoustic alarm reports superheating of the engine. In such case switch off the engine and check the cooling water circuits!

ATTENTION **If the engine does not start after a third try, please close the sea valve for the cooling system of the engine. Start the engine again. If the engine works, open the sea valve again (during ½ minute).**

3.16 Anchoring, Towing and Mooring

Anchoring

Please mind that the holding power of the anchor may not be sufficient at bad holding grounds, rough weather, waves and strong wind and that you have to take special seamanlike precautions to increase the holding power or to leave the anchoring place in time.

Towing

The anchor cable may be used for towing. It is however better to use a special towing line of the same thickness. For towing you fix the towing line at the two bow chocks like a bridle and/or if the towing distances are longer, you put an equally thick rope around the whole boat in order to distribute the strong forces. Other places are not suitable for towing, e.g. the mast base.
The tow line is to be attached in such a way that it may be slipped under load!

Please mind that when towing the speed must be less than what is called the hull speed. Otherwise the towing forces may damage the boat. The hull speed for this boat is approx. 7,2 Kn (= 13,4 km/h).
In accordance with the weather conditions, wave action and depth of water it may become necessary to strongly reduce this speed as the loads occurring in this case may cause damage.

Mooring

For mooring the boat belaying cleats and/or bollards are attached at the bow and the stern which are sufficiently strong to withstand normal forces in a protected port.
Protect the mooring lines against chafing and unintended loosening when the boat is unattended over a longer period of time.

3.17 Rigg

Backstay adjuster/Tackle not to be completely released when sailing for causing danger to the mast.

3.18 Manuals and Operating Instructions

Manuals, operating instructions etc. may be supplied in compliance with the contract specifications.

Please read them carefully and take note of the guidelines and notes contained therein!

4. Environmental Information

Sailing is a quiet sport. Please handle your yacht in a responsible way and render your contribution so that nature is not damaged more than inevitable.
Please follow the notes on nature reserves, national parks and other protected areas.
Navigate your boat with care to keep away from such areas and do not endanger yourself unnecessarily when in difficult sea areas.

Please pay attention to the following sections.

Fuels and Oils
Fuels and oils are an environmental hazard because they pollute, impair and damage nature for a longer period of time.
Handle these substances with care on board so that nothing of them is drained overboard during filling or emptying.
Take special care before pumping the bilges so that the bilge water does not contain oil.
Use special oil absorbers for cleaning the bilge water or pump the bilge water in special canisters, which you dispose of according to rule once you are on shore.

Waste Management
Wastes of all kind have to be disposed of according to environmental rules. For this purpose you should separate the wastes on board and take them to the relevant waste containers on shore, in the ports. Reduce the amount of waste, in particular by reducing packaging! Use packages which you can reduce in volume after they have been used!
Glass packaging also does not belong into the water!

Sound
Noise is also an environmental burden. Existing sound insulation in the engine room is to be kept clean and must not be coated with paint.
Please choose an engine speed which keeps noise within bearable limits.

Wave Formation and Swell
Swell develops in particular by driving the boat near hull speed. Bow and stern wave are especially distinct at this speed.
Reduce speed when driving in narrow waters and within protective maritime belts.
Pay attention to speed limitations on water and observe them.

Exhaust Gases
Exhaust gases are an unavoidable environmental burden.
Pay attention to the colour of the exhaust gas as this can be an indication of a faulty adjustment of the engine! Blue or sooty colour points to a serious faulty adjustment. Have it repaired.
Do not run the engine as an "auxiliary device" for loading the battery when in port but use the shore supply unit or a battery charger.

Colours, Detergents and other Substances
Underwater coating (antifouling) is used to prevent fouling on the hull. This coat of paint is not a protection (e.g. against osmosis) for the boat body.
Please note in this context that certain coatings are not permitted.
You should lay underneath a foil when working, grinding etc. and/or use an efficient sucking device in order to dispose of the grinding dust according to the manufacturer's instructions.
Apply mechanical methods, if possible, for removing layers of coating. Removers of varnishes and paints are very aggressive and mostly have to be treated as hazardous waste.

Waste Water
The toilet produces most of the waste water on board. You should collect it in the tank and dispose of it on shore. It makes sense, when in port, to use always the facilities available in the ports.
Please note the existence of treaties which prohibit the discharge of human waste tanks, e.g. for the Baltic Sea. Some countries have adopted rules prescribing sealed shut discharge devices on board.

5. Maintenance

5.1 Care and Cleaning

The boat should only be cleaned with fresh water, if possible. Environmentally compatible cleaning agents suitable for FRP and varnished surfaces may be used for persistent dirt. Do not use any agents containing silicone.
Special agents are offered for further treatment such as refurbishing and sealing of FRP surfaces. Only use agents suitable for it!
Metallic parts may be cleaned with metal polish. Please note that aluminium parts are anodised and must not be treated with scratching or polishing agents.

5.2 Repairs, Replaceable Items

Should damages occur on the boat when in use, please use only parts supplied by the manufacturer or parts equal to them, if possible. This applies mainly to parts which have to stand certain stresses, e.g. parts of the rigging, deck equipment etc. Our shipyard will assist you.
Repairs on the hull, drive system, rigging and sails should be left to a specialised company as they have the relevant equipment and special knowledge of how to return to you a high quality boat after a repair. This applies to damages of the structure, in particular.
Our shipyard will support you and recommend the names of specialised companies, if required, which are in the position to carry out the repair in an expert manner.

5.3 Inspection of Units and Systems

The reliable functioning of the individual systems is important for the save operation of the watercraft. Check equipment and systems regularly for their operativeness. Please use for this purpose the Manual and/or the attached operating instructions.

5.4 Winter Storage

Winter storage is the time when your boat is unattended for a longer period. It must rest safely during this time and should be stored in such a way that it is protected from atmospheric effects.
Pay attention to Section 2.6.
Empty the drinking and waste water tanks! Open the valves and empty them from remaining water.
It is best to fill the Diesel tank in order to reduce the formation of condensed moisture.
Remove all wastes.
Clear the boat of valuables. Cushions and sails should be stored in a dry, ventilated and frost-free place.
If the boat is covered by a tarpaulin, you should ensure good ventilation under the tarpaulin. The ventilation openings of the boat should be kept open, if possible.
The tarpaulin should be well secured so as to prevent chafing on the hull, in particular the FRP.
The sea water circuit of the engine system must be drained, including the exhaust system.
The inner cooling circuit contains antifreeze and does not need to be drained provided it contains sufficient antifreeze to cope with the temperatures to be expected.
The batteries must be removed from board and stored well charged in a dry and frost-free place. If they remain on board, they should be recharged regularly.

6. Warranty

Please contact your contracting partner in case of a warranty claim.

7. Closing Remarks and Notes

We have tried in the previous chapters to give you some advice on how to handle the boat.

You may have gained your own experience with boats. Our advice can only be supplementary and does not replace your own personal seamanlike diligence as owner or skipper.
We, the shipyard, have handed over a safe and reliable sailing yacht which will withstand stress when used, according to the acknowledged rules of engineering and in compliance with the European Recreational Craft Directive.
Naturally, damage to the boat cannot be excluded under extreme stress such as weather, striking the ground, collisions etc.
The owner and skipper is responsible for personal safety equipment, i.e. life vests which should be available for all persons aboard. This also includes the procurement and maintenance of a liferaft, distress signals, first-aid box, tools, major replacement and spare parts and others.
As the European Recreational Craft Directive pays special attention to safety and fire protection you should acquaint your crew with the safety devices and fire extinguishers and instruct them in how to handle them.

We are constantly working on the further development of our sailing yachts. Please understand that we have to reserve the right of any changes in design, equipment and technical installations. Therefore, the data, pictures and descriptions in this Manual shall not be made the basis for any claim.

Should your sailing yacht be equipped with parts that are not described in the Manual and/or no description is attached to the Owner's File, your contract dealer will inform you about the correct handling and care.

8. Proof of Identity

(To be filled by dealer and/or contracting partner)

First launch: .....

Date (supply to owner): .....

Type of boat: .....

Hull identification and/or construction no.....

Contract no.: .....

Name of yacht: .....

Engine (make and type): .....

Engine number: .....

Gear (make, type, reduction): .....

Propeller (make, type, dimensions):.....

Dealer, representative (name, address):.....

.....

.....

Signature/stamp of dealer: .....

9. Acknowledgement of Receipt

Please return with signature to:

Dealer address:

Acknowledgement of Receipt

Name: .....

Address: .....

.....

Owner of Hanse 342 HIN DE-YZG34147I304

This watercraft is covered by the warranty which has been handed over with the craft.

This warranty shall enter into force.....(date)

Signature:.....

Information to dealer:

Please return this Acknowledgement of Receipt
To:

Yachtzentrum Greifswald GmbH & Co.KG
After Sales Department
Salinenstrasse 22

17489 Greifswald (Germany)