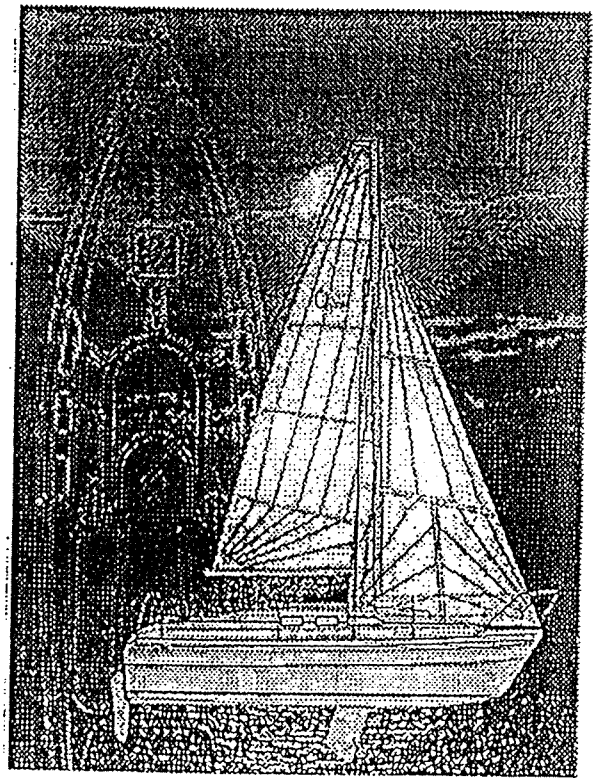
Manual for the owner and captain



Kielschwert-Yacht "Odin 820 classic"

Odin Yachten Polska
ul. Spalska 103/105
97-200 Tomaszów Maz.

Contents

Certification

The EG guidelines recommend the certificate Modul Aa for yachts of this size. This means that the maker agrees to the building and fittings in the guidelines and gives a written confirmation (see Declaration of Conformation).

Identity

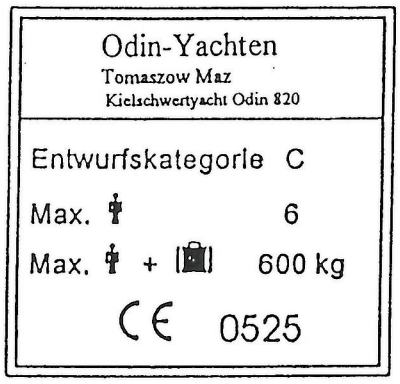
The registration number of the hull is engraved on the mirror on the starboard side. This is a world wide unique sequence of numbers and letters. It is

PL-ODY05782J302

Identification plate / Makers nameplate

The identification plate on the fore wall of the cock-pit is stipulated by guidelines, stating that certrain information must appear here.

Makers nameplate



Explanation

Design category C : Coastal waters

Max. 6 : This is the maximum number of persons, recommended by the makers, who should be on board when the yacht is in waters suitable for this design category. During trips in sheltered waters the number of persons on board can be increased according to the maximum load.

Max. + 600 kg: The maximum load is 6 persons supplies, provisions, fuel and personal belongings.

CE 0525 : CE symbol is the certificate that the boat has been built according to the given Guidelines. The numbers are the code given by the certificate office in this case the Lloyd's Register Qualitiy Assurande GmbH (see Declaration of Conformation).

Safety Advice

When the yacht is at heel angle 90° (completely on its side) and the centre board is pulled in – it still has a moment to straighlen up. It is possible to increase this moment in extremely bad weather conditions by pushing the centreboard half way out.

Authorized person in the EU

Lamprecht Boote: Ansbacher Straße 19; D-91710 Gunzenhausen-Schlungenhof

EG- declaration of Conformity

In accordance with EG-Guidelines, Recreational Craft Directive 94/25/EG, Appendix XV

We declare that the boat described in the following paragraph corresponds to the guidelines of the EG for recreational craft, in its conception and building including safety and health regulations as well as all the fittings th we have included in the marketing.
Any changes made to the boat which concern the basis safety demands which have not been agreed with us, will lead to this declaration being invalid.

Description of the boat:	Odin 820
Boattype:	Centreboard keel yacht
Serial number of the hull:	PL·ODY05782J302
Design category:	C Coastal waters
Module:	Aa
Applicable directives:	EG-RL Sportboat (94/25/EG)
Applied norms:	see construction
Inspecting place:	Lloyd`s Register Quality Assurance GmbH.
Address:	Mönkebergstr. 27; D – 20095 Hamburg
Rest results Nr.:	HYS 0120015

Date/Signature of the
authorized person in the EU .....

Boatyard: Odin Yachten Polska ul. Spalska 103/105 97-200 Tomaszow Maz.

Important Notes

The trailer supplied by us has been designed solely for the Odin 820 Classic. We advise you not to use any other make of trailer.
Our trailer is ideal for slipping, transporting and storing the Odin 820. All the ri-enforcement's have been calculated so that no problems will arise if the normal care is taken.

Trailer

Tighten the nuts and bolts on a new trailer after 50 km. Check the lights again and the braking system.
The trailer must be serviced by specialised workshop at least once a year. MOT every two years. Take notice of the makers rules for the brakes, axle, bearings and towing system.
The bow supports and the axle are adjustable, so that the load can be adjusted to comply with the rules governing the towing vehicle.
This must also be done with different engines. To ensure the safety of the yacht use only the recommended straps.
The winches on the trailer must not be pulled taught. That means that the steel cable must be loose.
Make the yacht safe at the front using suitkable material and clamps.

Caution – the front loop on the hull could loosen if the weight is too much.
When transporting the yacht always support the centreboard (in case of damage).

When towing it is essential that the ballast tanks are empty.

⚠ SICHERHEITSHINWEIS ⚠

Seien Sie vorsichtig! Menschliches Versagen wird durch viele Faktoren verursacht: Unachtsamkeit, Müdigkeit, Überlastung, Zerstreutheit, Unkenntnis des Produktes, Drogen und Alkohol, um nur einige zu nennen. Schäden am Boot und Außenborder lassen sich in kurzer Zeit beheben, aber Verletzungen oder Todesfälle sind dauerhaft.

Zu Ihrer eigenen Sicherung und zur Sicherheit der anderen Personen sollten Sie diese Bedienungsanleitung vollständig durchlesen und alle Sicherheitshinweise und Empfehlungen befolgen. Lassen Sie keine Sicherheitsvorkehrung und diesbezügliche Anweisung außer Acht.

Jede Person sollte vor dem Führen des Bootes und dem Bedienen des Motors diese Bedienungsanleitung lesen und verstehen.

Operating the water ballast tanks

The water ballast tanks must always be full when sailing. When motoring up to 7 knots the tanks must also be full.
When motoring over 7 knots the water ballast tanks may be emptied.

Filling the ballast tanks

Open the latch on the stern and the air valve. The tank is full when the water rises to 5 cm under the air valve important – then close all the valves.

Emptying the ballast tanks

Open the stern valve and the air valve before slipping or lifting with a crane.

Emptying to glide

As above – both valves open

Caution The yacht is unstable when the ballast tank is empty.

General notes

Nautical rules and regulations must be followed during sailing and motoring as you have learned while obtaining your sailing certificate.
The captain is responsible for everything at all times.

Introduction

This manual should help you to enjoy your yacht safely. The manual contains information about the yacht including built-in extras, running and service. Please make yourself fariuliar with all the information before selting out on a trip.

We suggest that you photo-copy important warnings and diagrams to take on board in case of problems or repairs.

If this is your first yacht or if you are not aware of the special features of a keel-centreboard yacht, it ist important that you, acquire the knowledge for handling the yacht before you take over control. The shipyard will gladly inform you of courses to refresh or widen your knowledge.

The owner's manual is a technical document describing the yacht, to help the captain to identify and solve any problems. It is also useful for the owner to ensure that the necessary maintenance and care is carried out in order to keep the yacht in good condition and not reduce it's value.
But the owner's manual cannot replace the necessary nautical knowledge.

**PLEASE KEEP THIS MANUAL IN A SAFE PLACE
AND GIVE IT TO THE NEW OWNER
IF YOU SELL THIS YACHT**

Design category

The European Sportboat guidelines require that each boat must have a design category.

The Keel-centreboard – Yacht "Odin 820 Classic" belongs to Designcategory C

The design category C has the following characteristic guidelines.

Design category C: coastal waters

Designed for trips in coastal waters, large bays, estuaries, lakes and rivers, where the weather conditions of windstrength 1 – 6 and waves of up to 2 metres could be expected.

Applied harmonized standards eg standard designs according to directions (guidelines) 94/25/EG

EG-Richtlinie	ISO-Norm
1. Main mensurements	8666
2.1 Registration Number	10087
2.2 Makers nameplate/Number of Persons	14945
2.5 Owner's manual	10240
3.1 Construction (Design)	12214 Teil 1
3.2 Stability and freeboard	12217
3.3 Buoyancy and Floatability	12217
3.4 Advised maximum load	14946
5.3 Electrical system	10133
5.5 Gas system	10239

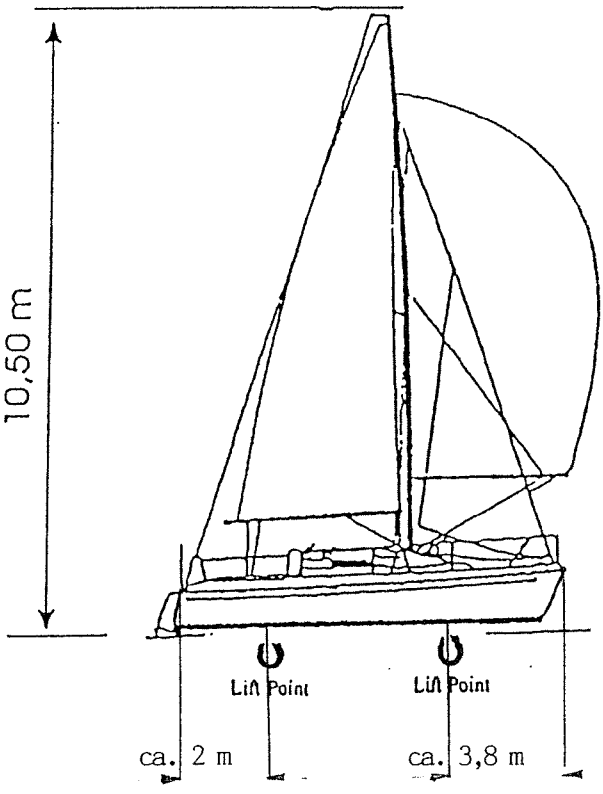
1. Description of the boat (yacht)

1.1 Main data

1.1.1 Main measurements

Hull length	LD		8,20 m
Width max.	Bmax		2,50 m
Empty weight			1.200 kg
Water ballast		ca.	700 kg
Draft with water ballast			0,35 m
Draft max.	Tmax		1,65 m
Clearance	HD		10,50 m
Motorization	until	bis	52,2 kW

* The clearance is important when passing under bridges or power lines. It is the height over the waterline to the top of the mast. This is without aerials, lanterns or radar reflectors. Please correct the clearance after adding instruments and note this in the owners manual



bei angebauten 70 PS Motor

1.1.2 Sail plan

As a family touring yacht the ODIN 820 inculdes as standard

	Rigg (qm)
Mainsail	Ca. 14,2 qm
Jib	Ca. 11,7 qm
Genoa	Ca. 15,7 qm

1.1.3 Displacement, Weight

Bulk of fully equipped boat (yacht)

Empty weigth	ca.	1.800 kg
Min. prerequired sails		2.500 kg
Bulk ballast		780 kg

1.1.4 Motorization (Deviations see Motor producer's Handbook)

Outboard motor
Possibilities 3,68 kW to 52,2 kW
(more details in operating instructions for the motor)

1.1.5 Electrical Installation

12 V Direct Current installation
The nautical lighting, cabin lighting, instruments and appliances use the normal 12 V Direct Current.

1.1.6 Battery (Optional)

The yacht should be supplied with a battery. Eg. Consumer battery 12 V 100 AH, Maintanence free, protected from leakage. The battery can be fixed into a plastic box in the starboard locker or in the small storage space in the toilet.

1.1.7 Tanks-capacitiy

The standard equipment inculdes 2 x approx 10 litre water tanks – moveable canisters with an electric pump in the kitchen (in front of the pantry) and in the toilet under the seat.
Optional: a water tank – size ca. 60 litres – can be built in under the swimming platform.
There is storage room, under the control seat, for a tank holding 22 ltr of petrol. It is possible for the makers to fix a 41 ltr plastic-petroltank under the control seat.

1.1.8 Maximum Persons, loaded

The guidelines demand, that a recommendation is made as to the maximum number of persons on board each boat when the boat is in the specified area.
This yacht is designed for coastal waters only. I.e.: extended trips between ports.
The recommendation is as follows:
Not more that 6 persons should be on board for overnight, trips in coastal waters as there are 6 berths.

Note: There must be a life jacket on board for each person.

The load:

The rules for the load call for that the max. load is advised by the shipyard. It compromises the persons, the equipment, petrol, water provisions. That's all marked out on the plate in the cockpit. The max. load for the ODIN 820 is 600 kg. On this weight, the stability is designed.

1.1.9. Points for straps to crane, Points for slipping and caning, to transport the boat

to crane:
at a lot of harbours boats must be craned. While craning you have to hare a look at the placement of the straps. They must be placed according to the stability of the bull and to the weigth.
Please pay attention, that there is no strong strenght cross (don't tighten the straps to much). The points are showed in the owners manual.

to slip:
If you take the boat out of the water on a marine railway, it is only allowed with the special ODIN trailer. The centerboard and the rudder blades must be pulled up. You have to look for to anchor the boat expertly on the trailer.

to transport:
To transport the boat, you have to follow the same rules as pointed out before. The transport is only allowed with the special ODIN trailer.

1.2 General plan

1.2.1 Fittings plan

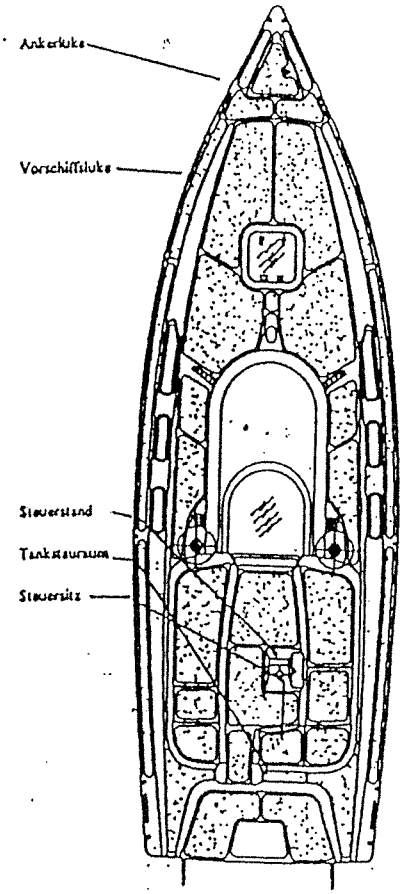
Anchor hatch

Forecastle hatch

Command station

Tank storage

Steering seat



1.2.2 Decksplan mit Erläuterung

Forecabin berth

Main berth

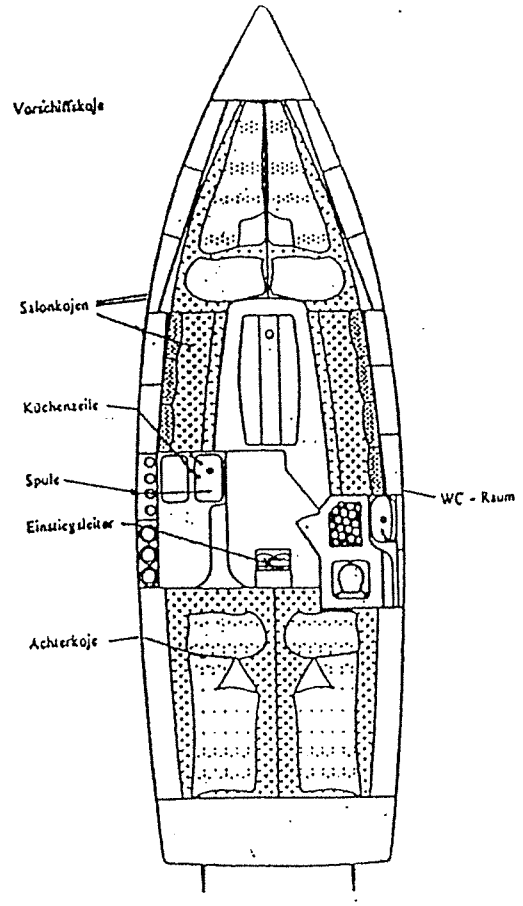
Kitchen uints

Sink

Ladder

Toilet room

Aftcabin



Decksurface
The fllorboards and seats in the cockpit are made of either non-slip material or teak wood (not standard)

Caution
Walk only on the non-slip surfaces (to avoid damage and danger of slipping)

Metal fittings and hatches
All metal fittings and hatches have been made in non-rust, sea-water resistant materials. They are screwed to the fibreglass reinforced polyester deck and carefully sealed.
Seawater proof aluminium has been laminated into the deck where the fittings have been attached.

Wooden and other parts of the construction
The sliding hatch cover is made of Plexiglas

Guardrail
The deck has been fitted with bow and stern pulpits of Niro-Rohr (nylon ropepiping).
The guardrail runs between these at a height of 500 mm. The base of the rail posts are made of sea water proof light metal and are attached to the toerail and screwed to the deck.
The stanchions are pulled out and joined by two lengths of uncoated Niro rope 7 x 19 held by srews.

Advice an care and maintenance

Niro-metal-fittings:	repolish dull and dark patches so that the Niro retains it's rust proof quality.
Winches, pulleys:	At the very least remove these, clean and treat them with the correct lubrication, before staring for winter.
Windows, hatch glass:	Wash with clear water and polish with a soft cloth.
Teak wood:	Wash regularly with clear water. For a richer colour, sand lightly and soak with teak oil.

1.2.3 Short description

The Odin 820 is a slooptakling round bilge sailing yacht with two lifting rudders and a plastic centreboard weighing ca. 55 kg.

Construction
The Yacht is built of fibreglass reinforced polyester. The hull and deck are hand-made. The body of the yacht under the water-line is of a double shell constructions.
Above the water-line is a solid laminate. The hull is stiffened with a solid laminated main bulkhead of plywood and fibreglass reinforced polyester built – in parts. The deck is a sandwich construction.

The Osmose-Safeguard is guaranteed by the use of Isophtalacid gelcoat and Isophval acid resin for the laminated body of the boat. In addition, the laminated interior parts which could be exposed to water, have been given a top coat to help conserve them.

Stability

Design, weight destribution, dimensions and ballast have all been calculated to establish the stability. The yacht is sufficiently stable. In extreme cases, with a lean of 90°, the yacht will straighten.

1.3 Powering system

1.3.1 Plan of sails

The designated standard sails for the Odin 820 are.

Mainsail 14,2 qm	Cloth thickness	270 g/qm
Forecourse 11,7 qm	Cloth thickness	270 g/qm
Genua 15,7 qm	Cloth thickness	270 g/qm

The qualitiy of the sail cloth has be chosen according to the wind strain.
The necessary mast fittings have been attached in order to be able to set the sail.

1.3.2 Rigging plan

The mast stands on deck in a mast step.

Length of mast: 8.500 mm Length of boom: 3.000 mm Crosstree/spreader arm: 870 mm

The dimensions are higher than the minimum demanded. All the rigging and ropes can be handled from the cockpit.

- Headstay	4 mm, Niro 1 x 19
- Backstay	4 mm, Niro 1 x 19
- Crowfoot	4 mm, Niro 7 x 19
- Shroud	4 mm, Niro 1 x 19

Further advice:
Rig: Rinse the whole rig with freshwater before winter storage. You should, also check all the standing and moving parts, folding and rigging screws. Scractched/frosted bolts and rollers must be changed.
Grease the movable parts with the correct lubrication. Graphite for the rigging screw is partculary advisable.
Spray the slide of the main sail with a gliding agent.
Look for chaffing on the mast and boom these places should be cleaned and brushed over with a clear aluminium lack. Niro-metalfixtures, must be polished so that they retain their qualities.

Sails
Plastic sails are sensitive to ultra-violet light and if they are to be left on the boom they should be covered.

- Do not store damp sails for long periods of time.
- The sails should also be washed with clear water and dried before winter storage so that they do not strain.
- Seams should be checked and repaired if necessary.

Caution
Before every sailing trip:
- Check every wire/line, cordage, rigging screw and the spints
- Secure the spints with sticky tape or by turning back again
- Change damaged bolts

1.3.3 Engine – Instructions
Surfing – Propeller

The yacht can be driven using only the outboard motor. It is accessible over the flap and seatbank behind the command station. The petrol tank is in the aft on the steuerboardside.
The pipes of cooling water for the motor are in the outer lining near to the motor.

Caution
Pay attention to the thickness of the rubber links

Maintenance instructions
It is necessary to follow the operational and maintenance instructions in the manual of the motor manufacturer.

Propeller maintenance instructions

Inspect and clean the propeller before it is put into winter storage. Knocks, and dents must be repaired. Afterwards the propeller must be balanced.

2.1 Tanks and pipes-Water

2.1.1 Freshwater, drinking water, cold (option)

The yacht has 2 x 20 lit capacity water tanks in the form of canisters.
Removal of water is from a tube leading from the water pressure pump.
Behind the pump, the whole installation has the same pressure. When the valve is opened the water pressure pump is activated.

Instruction
Change the Water in the tank from time to time. Also you should use normal water processing methods.

2.1.2 Saltwater circulation

Saltwater is needed for the motor cooling system.

Caution

If you are not on board for a longer period put the out board motor out of the water to avoid corrosion.

2.1.3 WC Installations

The toilet on board is a normal chemical-WC. Take notice of the instructions for use accompanying it.

2.2 Tanks and pipes – fuel

2.2.1 Outboardmotor – fuel

The storage for the fuel Tank is under the steering seat – aft. Take care that nobody trips over the fuel pipes.
For further information check the manual of the out board motor. Especially the description of the tank and pipes.

Caution

The perfect working order of the motor and heating is only possible when the fuel is clean.
Therefore it is absolutely necessary to inspect and clean the water blocker filter regulary.
Once a year the tank must be completely emptied and cleaned.

Principle and handling of the steering-gear

The steering gear is for navigating the boat under sails. The rudder-head, the connection to the rudder-blades, is extreme stable built, and has overcome any hard test. Nevertheless, you have to pay attention to some important points.

With the uphaul and downhaul-line on stern, you will be able to put the rudder-blades in position. Please pay attention, that there is no dirt between the rudder-blades and the rudder-head. The rudder-blades have to be kept strong in the rudder-head, and they should not shake. Pay attention that the automatically nuts with the white plastic item are standing on the shrouds. Tighten the nuts, that you nearly are able to move the rudder-blades. Nurse the rudder-head with a siliconspray. For transport you have to tighten the circuit-screws and the cleat the line of the rudder-blades. For sailing you have to put the rudder-blades in the right position. Have a look, that the blades must be down on the stop and they should be tightened by the tripping line. Please check this several times, when you are sailing. Going under the engine, the rudder-blades have to be triced up and to be pulled with the inclouding screws. Please check before you go out, the screw-cap between the rudder-head and the stern of the boat. Minimum three times a year.

With all other contacts of the steering gear you have to do in the same way.
The steering is made for engines till about 225 PS and has to be triced up once a year from an anthorizied magazine.
You never must turn the steering over the stroke.
Try carfally to get to the stroke.
Pay attention to the depth indicator.

The balastet Centreboard

The centreboard only has to be veered while sailing to avoid drifting away. There is a line to handle the centreboard which comes off under the mast and goes sideways to the clamps. The draft of the centreboard is about 1,40 metres. Please pay attention, that you never touch on ground. The function to put the centreboard up and down must be checked every year in a special magazine, and the rope must be renewed if it is necessary.

Under the engine the centreboard must be absolutly put up. Only under maneuvering between jetties the centreboard may be put down 1/3.

Hull-underbody

If the boat stays longer than 14 days in the water, you should do an antifouling. Please take advise from a magazine which is competent to do this work also about osmosis. The hullanderbody has to get a special maintenance. Please let advise you about all important points.

Warning

When filling the tanks
- Turn off the motor and cooker
- never smoke
- never handle open flames

Caution

In the advent of fire shut the fuel stopcock

2.3 Steering gear

2.3.1 Description of the system

The rudder is a free hanging double rudder (lifting rudder). It is operated from the command station in the cockpit.

2.3.2 Rudderblade

The rudder blades are sectioned and made of fibreglass reinforced polyester. The rudder stock is let into two easily accessible special rudder slots. The rudder stock has a diametre of 64 mm and is trimmed at both ends. The rudder is held by a clamp at the top of the stock where also the rudder steering stick is attached. The clamp is also secured by a pin on the rudder stock.

Danger!

Check regularly and keep in order:
- Tighten fittings on the rudder head and clamp ring.
- Tighten the clamp on the rudder stock.

2.4 Bailing out pumps, pipes

The anchor case is facing the boat, water tight. If releases the water through two operings directly, overboard.

2.4.1 Description of bailing out system (Optional)

The yacht has bailing out hand pump. The position for bailing out is set aside Bailing out by hand. A pump strainer is fixed in the cabin directly next to the floor support. It is connected by pipes to the hand bailing out pump, installed in the aft of the cockpit. The water is released through an opening in the outer shell in the aft. A special bucket is a very good device for bailing out.

Caution

The yacht has a hand bailing pumping out system
The pump clapper is clicked into the seat locker and is easily accessible

Warning

It is possible that the whole pumping out system is not enough to empty the yacht after a collision. In such a special case it is necessary to take other action eq. using a sail to cover the damage

2.5 Electrical system

2.5.1 Direct-current-mains on board

All appliances on board use the 12 V direct current mains.
The main parts are:
- starter battery
- Consumer battery

Warning

Never turn off the main switch when the machines or the motor starter are on

Distribution of power is from the distributor in the cabin on the starboard side
- the code data: 5 circuit with safety switch

The names next to the switches show each appliance. The main switch is below the companionway to the cabin.

Charging the batteries (optional)
The Yacht has a 12 V 50 Ah battery
The battery must be charged by an external charging appliance

Direct current-mains
Important circuits are
- Position lighting
- Cabin lights

The nautical lights take precedence if there is a reduction in the power capacity, all other appliances must be turned off.
If the machine is on while sailing (optional when showing Lima) it is possible to recharge the battery enough for the essential appliances.

Motor and power control (optional)
There is a marker on the fuel tank to show the level of fuel. The controls for the motor are on a panel in the cockpit. The temperature indicator of the exhaust is especially important in shallow water and tidal waters. If the salt water filter is blocked or the flow of water is hindered for any other reason, then overheating will occur. The warning sign is, in this event, a reliable indication.

Cabin lighting
Each of the lamps in the cabin has an individual switch so that energy can be saved.

2.5.2 Important instructions for direct-current system

Instructions

Maintenance free batteries have to be charged during winter to at least 50 % to prevent freezing.
Once a year the contacts (electrical points) should be checked and sprayed with a special spray.
Become accquainted with the curcints and the whole electrical system so that you can react to any problems quickly.
When a piece of equipment fails, check first to see if it is faulty.

Caution

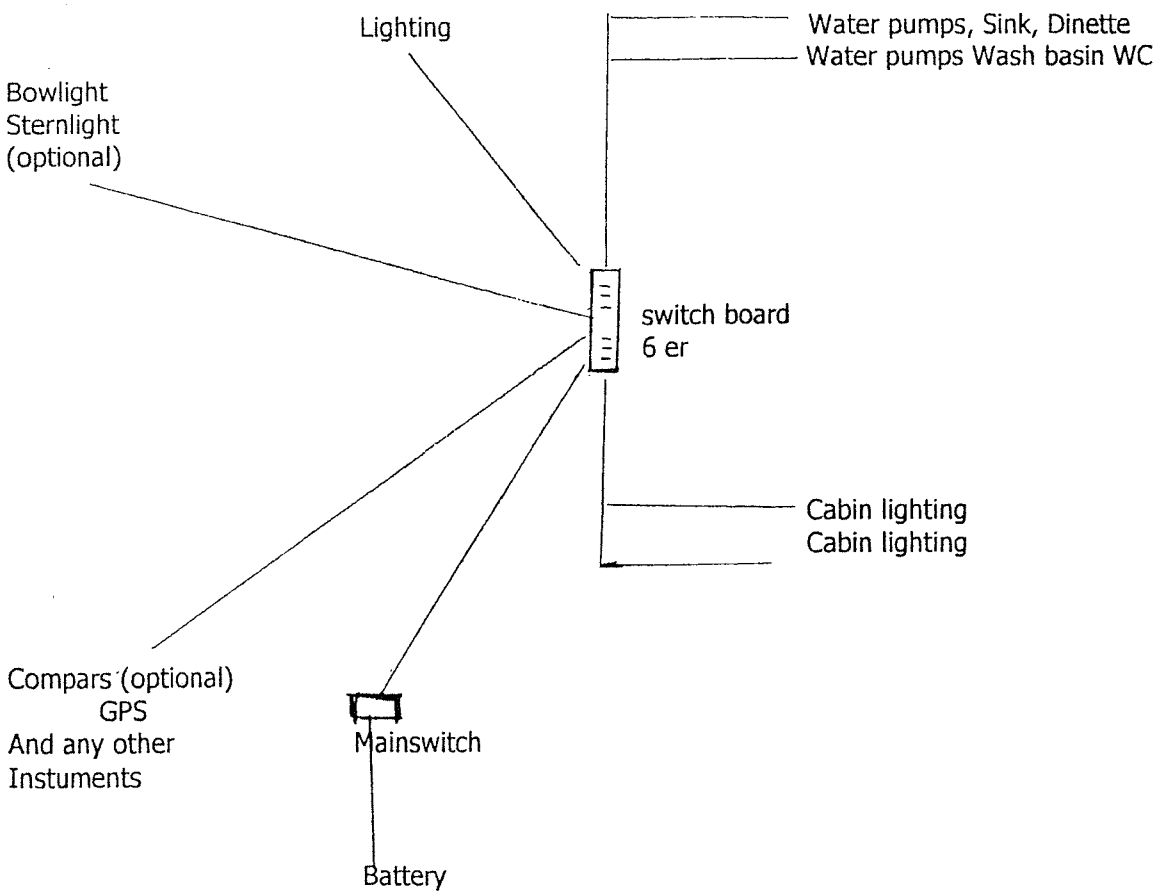
Before beginning a trip check
- voltage of the battery
- nautical lights

Have spare navigation lights on board

Caution

You should never
- work on electrical equipment when the electrialy is switched on
- change fuses and protective equipment
- change the plans of the electrical installations; this may only be dene by a qualified electrician
- change parts of equipment or intall other pieces needing more power than can be provided
- leave the boat when electrical equipment is working

Grouping of electrical consumption



2.6 Fire protection

2.6.1 Prevention

In construction every possible thing has been done to prevent danger of fire. Including the choice of materials and the distance between the flames of the cooker and the built-in furnishings.. As the owner of the yacht you should keep it in good repair and take note of the following instructions:

Caution

Keep the bilge clean and check regularly whether the yacht smells of fuel.
Do not attach any curtains near the cooker or any other open flames.
When using the cooker take note of the security regulations for cooking:
- First light the pilot light and then open the stop cock directly on the cooker.
- When it is not in use for longer periods the stop valve on the supply container should be closed.
- Control and clean regularly the bottles, valves, pipes and the cooker (chafed parts should be changed immediately).
- Parts of the gas installation must never be touched by grease or greasy things.
- Check sealing with soapsuds.

For preventative fire protection you and the crew should note the following instructions

Never

- Block hatches or exits
- Change the position of security fixtures eg. Fuel and gas valves
- change any of the electrical, fuel and gas installations
- leave the yacht when cooking and/or heating appliances are on

Never

- use gas light in the yacht
- fill or change fueltanks or gas bottles when the motor is on or when cooker or heating appliances are being used
- smoke when working with fuel or gas

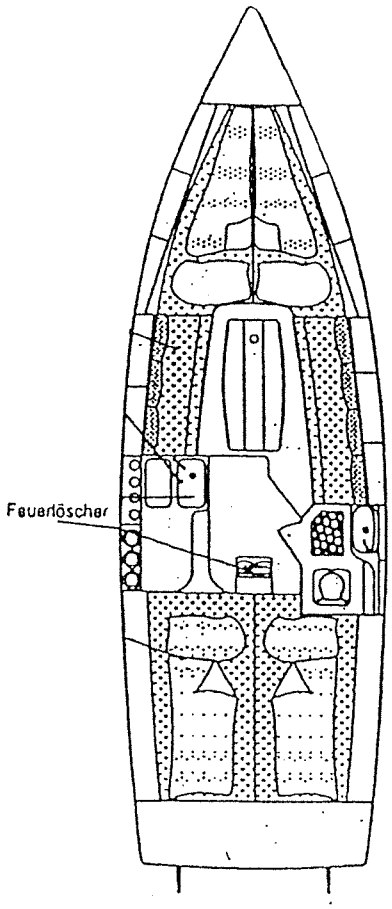
2.6.2 Active fire protection

The cooker in the pantry is a recognised danger zone.
The yacht has a hand fire extinguisher attached in the following place:

Nr. 1 Powder extinguisher under the top step of the companionway. Class 5A/34 B

In addition there should be a light fire extinguisher blanket of fibreglass cloth. Which is particularly useful for burning cooking fat.

The position of the fire extinguisher is marked on The diagram.



2.6.3 Fire fighting

If despite all security measures, there is a fire on board, You should act accordingly

- all persons not actively fighting the fire should go on deck either
- through the companionway
  or, if the fire is in the pantry
- through the escape hatch over the forecastle bearth

Fire in the pantry

First turn off the valve of the fuel pipes. Then smother the flames with the fire blanket. This can be used again.
If the fire has spread to the furnishings use the hand fire extinguisher.

Fire in the living area
The fire blanket can also be used. A special bucket should be placed ready in the cockpit seat locker so that the fire extinguisher is only used in emergencies.

2.6.4 Important instructions

It is the responsibility of the yacht owner

- Regular checks and maintanence of fire extinguisher
- Replace fireextinguisher when they become out-of-date. Any new fire extinguisher must have at least the same capacity as the earlier ones. It is the duty of the owner or skipper of the yacht to ensure that.
- Fire extinguisher are easily accessible
- All the persons on board have been informed about:
  - Position and use of fireextinguisher and fire blanket.
  - Position and function of the fire opening for the engine room.
  - Getting out of the yacht through the escape hatch over the forecastle berth.

2.7 Anchor, Tow and Warping installation

The rigging for the anchor, towing and warping equipment is as follows in the Yacht Rules of the Lloyd's register:

2.7.1 Anchor

I Bruce Bower anchor ca. 8 kg hot-galvanized (Known to be an anchor with holding power). It is in the front chain locker.
It is shackled on to an anchor line: length 26 m, nominal thuckness 12 mm
Polyamide, 3-strandet hawser laid
The anchor line can be fastened to clamps on the fore or aft.

2.7.2 the mooring lines

- 2 lines 12 mm 16 m long polyamide.
These lines can be replaced with other materials with a larger diametre eg. Polyester (16 mm diametre) or polyprophylen (18 mm diametre).

2.7.3 Tow lines

In case the yacht needs to be towed, a tow line must be available, and only for this use.:

Diametre 16 mm polyamide, 3 stranded hawser laid 32 m long

Attention

Before setting out the skipper must be sure that
- the water-ballast tank is totally full
- the anchor lines of the Bow anchor are fastened
- the necessary towing and mooring lines are on board and usable

2.8 Openings, stop cocks

Leak plugs

In case of damage to stop cocks or openings it is advisable to have leak plugs of soft wood on board – with the diameter of the various sizes of stop cocks and openings so that these can be plugged at any time.

Attention

Close the stop cocks when you leave the boat for a longer period of time.
Stop cocks in the rooms, which are not evident eg. WC should only be opened when needed

Maintenance instructions

Board openings must be checked regularly to see that they are seal proof. Tighten nuts on the valves Check that hoses are tight.

Instruction

It is easy to see when rounded stop cocks are closed or open.

Closed: the lever is at right angles to the hose or pipe

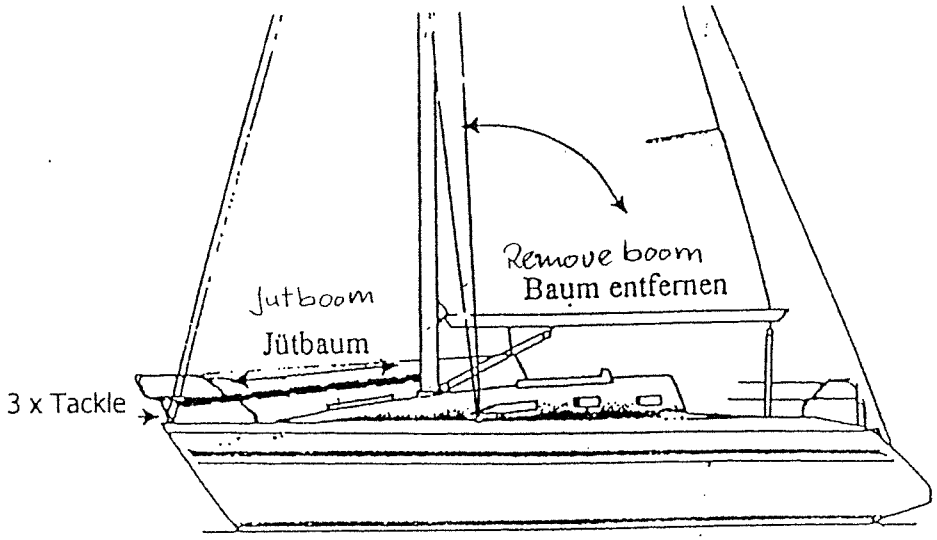
Open: the lever is at the same angle as the hose or pipe

2.9 Raising the centre board

The centreboard is raised with a rope hoist over the cabin deck. If possible do not let the centreboard plunge down, let it down slowly with lengths of line. For furthes information see the security notes at the front of this manual.

2.10 Mast raising system

On the outer side of the head stay is a 3-times block and tackle (pulley) attached. First release the head stay and attach it to the block and tackle (pulley). Then release the safety catch of the pulley. The jib boom (kluver baum) should be put into its hole in the mast. The rigging can stay in position – it does not need to be untied. The safety device on the side is guaranteed by the shrouds. The mast can be layed down easily by veering the pulley (Flaschenzug). Do not forget the after mast support.



3 Environment conservation

3.1 Fuel and oil

When filling the yacht with fuel you should be especially careful. A cloth put around the filter neck prevents fuel from the nozzle flowing into the water. For information on the amount of fuel see Cap. 2.2.1. In the engine manual there is a curve showing the exact fuel consumption. There are instructions as to the best revolutions per minute of the motor. To change the oil in the motor it is necessary to use a suck-off pump as one cannot let the oil flow out as in a car. The oil should be changed at least once a year even if the yacht has not been used much. With good maintenance the motor should never leak. The fundament of the motor is in the form of a closed bath to ensure that no oil can g et into the bilge and then be pumped out with the bilge water. If any oil gets into the bilge the water must be pumped out into a canister and disposed of with the used oil. To be an the safe side an oil-binding material should be on board.

3.2 Rubbish

Rubbish should not be put into the water – this is obvious to every water sports person. That means bio-degradable rubbish too. You should have a set place in the seat locker for rubbish on board.

3.3 Noise

A wet exhaust reduces the sound of the outboard motor significantly. Rubber bearings, elastic clutch and an insulated motor area also reduce the noise. Even so, you should avoid turning the motor up too high and reduce speed on busy waterways.

3.4 Swell

Natural river and lake banks are easily damaged by the swell from boats. From the form of the waves created by your boat you will be able to determine when to reduce speed in order prevent too much swell. Note the caution signs in narrow waterways.

3.5 Exhaust fumes

Control the exhaust fumes regularly. The exhaust fumes should not be black smoke nor should they be a cloudy blue. If this is the case, then either the air filter of the motor must be cleaned, which you can do yourself, or a qualified boat yard has to adjust the motor.

3.6 Anti-fouling paint

The body of every yacht, under the water-line, must be protected by anti-fouling paint, as vegetation growth means more energy is needed to power the yacht. The array of protective paint is now very large and the effect varied so that they can be calculated to match all types of water. Follow the advice of a qualified person. Coatings which will be effective for many years without wearing off, are desirable. If the anti-fouling paint has to be sanded off discuss the work with your storage company. When sanding the area under the yacht must be protected by a sheet of plastic in order to collect the dust which must be disposed of at a special depot.

3.7 Paint remover

Most paint removers contain aggressive components and should not be used. Mechanical removal of the coats of paint is preferable.

3.8 Soiled water

If the yacht has a holding tank, it is absolutely necessary, when in waters that provide no pumping facilities, that the connection to the direct flushing outboard is closed. The capacity of the chemical toilet is limited. As far as possible, the toilets in the yacht basin and other places on land, should be used. The chemical toilet should only be emptied into the designated container on land.

3.9 Nature preservation

Keep the written and unwritten laws of nature preservation. Follow the instructions in nature preservation areas, provided it is at all permitted to sail in these waters. When possible, observe and photograph the wildlife only from a distance. Do not sail up to mud banks with seals as this will disturb them. Keep, at least 300 m away from resting places of seals and bird colonies and keep within the fair way. Drive slowly through those areas.

4 Maintenance

4.1 Care, cleaning

Hull, Deck
Winter storage is the best time to inspect the hull and all supporting parts. If the gel coat layer or the protective layer has been damaged it must be repaired or applied completely new. If this is so you can get advice from the ship building yard. You will find instructions for care and maintenance of all the parts of the technical equipment in the relevant paragraphs of this manual or in the manuals of the manufacturers of the equipment accompanying this manual.

Cleaning
Clean your yacht if possible, as soon as it has been taken out of the water. High pressure cleaning machines will remove all vegetation. The care of the surface is your responsibility. All paint manufacturers give explicit instructions with their products (coating systems).
For boats operating in salt water: salt residue combines with water and accelerates corrosion. Whenever it is possible the yacht should be rinsed in fresh water.

Airing/Ventilation
Whether your yacht is inside or outside during the winter: good ventilation will hinder corrosion, spots and mould developing. Low humidity in winter will allow you yacht to dry out thoroughly.

Rig
Also during the winter storage the rig should be inspected closely. This includes the stationary and moveable parts, as well as the pulleys and the mast and boom sections. With little effort it is possible to repair all small pieces of damage on a horizontally folded rig.

Electrical equipment
All electrical points (contacts) must be free of corrosion and tightly connected. Check all the connections. The battery requires special attention. Even with the lable "maintenance free" – this does not mean that the battery can be left connected during frosty weather. Only a fully charged battery which is disconnected from the mains, will function correctly next season.

Hose clamps/clips
All the pipes in the water system, under the waterline are made extra safe by double clamping. Check that they are tight.

Tanks
Fuel tanks should be emptied of all residue and aired.
Water tanks: The freshwater tank should be emptied and left open.
The holding tank and pipes should be cleaned with a household cleaning agent and opened. The open ends of tanks, pipelines and hoses should then be covered with a light cloth in order to let air in but keep dust out.

4.2 Painting
Discuss the painting of your yacht with the storage firm or the boat yard if you have any problems. It is advisable to use the co-ordinated system of one manufacturer.

4.3 Built-in and removable parts
For an experienced skipper it will not be difficult to obtain special parts. If you need advice ask at a boatyard. If you need spare parts and cannot get the same make as the original parts it is important that you buy the same standard in order to retain the original high technical standard of your yacht.

4.4 Repairs
Any qualified firm can carry out repairs on the yacht's body. The interior has been designed so that it is possible to reach almost all areas without causing damage. Any technical problems should be repaired by a qualified firm. The boat yard can help you here too.

4.5 Winter storage

Directions for winter storage have been given in other paragraphs. The guidelines for a good winter storage firm are high technical standards for blocks, jacks and fine protection, easy accessibility to your yacht and an environment friendly work shop.

5 Finishing comments and remarks

The manual follows the instructions of the agreed European Norm EN 10240. A lot of the information may seem self-evident. Even so, we hope that spending time reading the separate paragraphs will help you to understand the technical system. The purpose of the manual is, as said at the beginning, to help you to enjoy using your yacht.
Certain things have not been mentioned for example all personal safety equipment. This is the responsibility of the skipper. It is of course necessary for there to be a life jacket for each person on board. Also in inflatable dinghy, flares, first-aid box, tool kit etc.
The guidelines for fire prevention and fire protection are especially important. The fire extinguisher must be serviced regularly and it is the responsibility of the skipper to instruct the crew in the use of it.
It is of course, best to be prepared for an emergency in the unlikely event of it happening.

6 General terms of business

General terms of business

For work on the yacht, under garuantee, the yacht must be delivered, free of charge, to Lamprecht Yachtzentrum Gunzenhausen

CAUTION

Do not stand on the sliding hatch

Caution

Sailing

The built in water ballast tank must be flooded and the centreboard down.
Open the stern valve to the water (pull the handle upwards). Open the air valve under the forecastle berth load/weigh down the stern with as many persons as possible. The tank should flood in approx. 10 minutes. Check the water level at the air valve. Close the air valve when no more air flows out and the water is approx. 10 cm under the valve opening. Finally close the water valve on the stern.

Motoring

The Odin 820 can glide at 29,4 kW, 40 PS with little load. For this purpose the water tank must be drained. Open both valves and move to full speed.
After approx. 10 minutes the ballast tank will be drained. Draining can be assisted by increasing the load along the longitudinal axis of the boat. Do not forget to close the valves.

Warning

All valves must be kept closed.
When sailing the water ballast tank must be full and the centreboard down

Caution

The skipper, person in charge, must see to it that the load on the yacht is evenly distributed between steuer board and back board. When the ballast tank is empty (danger of capsizing under extreme conditions). When heeling is extreme the mast can damage other boats.

Please pay attention, that the crew is always in the middle of the boat or in the cockpit when the water ballast is empty.

Warning

After slipping or setting into the water the ODIN 820, and before the crew set foot on the boat, the Water-Ballast-Tanks must be totally filled up, and the centerboard must be lowerd down.

If you sail the ODIN 820 without making sure that the Water-Ballast-Tank is completely full, the boat can tip over.

At planing speed under the engine, it is possible to drain the Water-Ballast-Tanks.
(Re-read the information in the manual). At planing speed, and with the Water-Ballast-Tank empty, the whole crew is not allowed, to leave the cockpit. The load on the boat must be distributed between starboard and backboard. If the Ballast-Tank is not totally full or empty, the water can slosh from side to side (Danger of capsize). The turning radius at high speed is relatively large, so you have avoid small tournings. While powering lift the rudders completely out of the water, also the centreboard.

Planing speed is only allowed at a quiet watersurface.

If you stop planing speed, you have to fill up instantly the Water-Ballast-Tanks.

At not observing this points the boat will capsize.

The skipper or person in charge must see, that the orders in the manual will be followed.

EC Certificate of Conformity

This is to certify that Lloyd's Register Quality Assurance GmbH, a Notified Body under the terms of the Recreational Craft Directive 94/25/EC, did review the manufacturer's test calculations and/or control of stability and buoyancy as detailed in Essential Requirements 3.2 and 3.3 for the Boat Design Category C Craft identified below to verify that these Essential Requirements have been satisfied in accordance with the module Aa of the above Directive.
The Notified Body have not intervened in the control of production as may be inferred by the affixing of their identification number after the CE marking.

This certification is issued to:

Applicant	:	A. Palarz Import - Export Inh. A. Palarz Mergenthelmer Str. 1 a D-97082 Würzburg
Boat Type	:	Sailing Boat with Water Ballast "ODIN 820"
Module	:	Aa
Hull Length	:	8.20 m
Manufacturer's max. recommended Load	:	600 kg (excluding tank capacities)
Max. Number of Persons	:	6
Manufactured by	:	Odin Yachten Polska ul. Spalska 103/105 97-200 Tomaszów Maz.
Specified Standards	:	ISO/DIS 14945, ISO 14946, ISO/DIS 12217-2, ISO/DIS 11812
Certificate No.	:	HYS 0120015/A1
Date of Issue	:	22 April 2002

LRQA GmbH
EC Distinguishing Number: 0525

Name:
Lloyd's Register Quality Assurance GmbH
W. Scheel

Handling of the Original ODIN TRAILER

The ODIN Trailer ist specially constructed for this boat. The steel construction of the Trailer is protected by galvanizing against corrosion. Avoid trips over the Winter on Salted roads and don't slip de trailer into salt water. If you were in salt water, please clean with clear water afterwards. Pay attention to the brakes. You should clean them very carefully with clear water. If it is necessary they must be maintenanced by a specialist. After slipping the boat, or cleaning the brakes with water and after a trip between raining, the brakes should not be applied.
Please pay attention to the instructions for the Trailer.

To slip the ODIN 820

It is no problem, to put the ODIN 820 into the water with the original trailer. We will tell you how to manage. The marine railway should be good. Your car must be able to pull the boat. Put away the straps. Stop when you enter the water with the cuppling of the trailer. And put away the winch rope from the boat.

Pay attention, that all connections between trailer and boat are loose. Safe the boat with a line against drifting. Now you drive backwards until the mudguards are under the water. Now push the brake and the boat comes over the rolls into the water. Now the boat is floating.

To slip out of the water is the same way backwards.

Pay attention, that you have got good material of straps to tighten the boat on the trailer. It isn't necessary to tighten the traps hardly, let one cm air. The ligthning on the trailer must be secured by lines.

Completion to the ODIN 820 Manual

We would lila to advise you to pay attention to following points.

At the end of the season the boat must be checked by an ODIN specialist magazine.

Tests:

- Water ballast tank, valves and vent plus must be tested of tightnes and damage.
- Check of the whole hull
- Check of the hull underbody, and if it is necessary, do the antifouling.
- Check of the whole centreboard inclouding the tackle and all lines.
- Check of the complete steering system inclouding the rudder-blades.
- Check the motor mount
- Check of all anchored intems
- Check of standing rigging
- Check of running
- Check all of fittings
- Check of all hatches
- Check of the mast foot and steering
- Check of the whole eletric
- Check of all waterlines pumps, and tanks (if it is necessary: cleaning)
- Check of all petrol lines
- Fire extinguisher

Important Note

Not to lose the guaranty, it is absolutly necessary to do these maintenances. You have to prove that. This is a point for your own security.

Care and maintenance of metal on board

Not only cars must be cleaned regularly if the are to remain looking nice. Also our boats and especially the metal fittings require regular cleaning with fresh water to prevent salt and other deposits causing corrosion.

The stainsteel is made corrosion-proof by a thin layer of crome. If this is damaged corrosion can begin.

Who has not been upset over these brown spots. They are caused by windborne rust and particles of ferric oxide that are present in the air near towns and docks. As soon as the windborne rust settles on the protective layer it will destroy it aggressively and quickly.

Stainless steel only remains in perfect condition if it is regularly cleaned and maintained. Make it a regular habit to wash the boat thoroughly with fresh-water including the railing. Support rods, bow and stern pulpit, as well as all niro fittings. Fresh water rinses off salt, soot and fresh layers of windborne rust. The protective layer is aired and its function can continue. On brown marks, where the corrosion is very bad, one can use 10 – 20 per cent watered down nitric acid but only on the steel parts, then rinse thoroughly with fresh water. Of course even the best care won't help if the stainless steel is not properly polished.

Take care when buying that the metal fittings have a first class high polish especially the curvatures on the welded seams. You won`t be happy, for instance, with matt grey railing posts, which are only machine polished and have no manual fine finish to them.

Almost all metal cleaners for the care of Nirosta fittings on boats are suitable.
Depending on the location of mooring, all Nirosta steel parts should treated 3 to 6 times in the season. It is difficult if the boat is moored on water the whole year in the aggressive and salty climate of the Mediterranean and can not be cleaned over a long period. Then, a special remedy is needed. Before leaving the boat, all fittings must be thoroughly rinsed with fresh water and any corrosion removed with metal polish. Finally use plenty of Vaseline on a soft cloth on all metal fittings. Vaseline plays a special role also in the care of chrome fittings on board. Contrary to homogeneous stainless steel the fine chrome film layer on bronze and brass fittings is approximately I thousandth m.m. thick. The underlayer of nickel or copper is only 20 thousandth m.m. thick. This explains why the chrome layer is generally so sensitive and easily affected. Additionally, this ultra-fine metal layer has a microscopic porosity. Through these fine holes, corrosion active particles can get under the surface and start destruction – causing little bubbles and black marks which we are all familiar with on our car fittings.

For chrome parts a thorough greasing with pure Vaseline is strongly advisable. This seeps deeply into the fine pores and seals off all aggressive substances.

In spite of many manufacturers claims that chrome care fluid build up a water repellant protective film after polishing, this is not the case in aggressive sea climates. Vaseline is a must and should be used after every cleaning.

The chrome can only shine when the undercoat is perfect. If after a certain time, the fittings become dull, the a new layer of chrome can be considered. Before this work is carried out by a firm, a price estimate should be requested. The old chrome must be stripped completely and the fittings must be polished by hand. This is a very expensive procedure and often more expensive than a new fitting. As a rule this is only worth doing if special fittings are involved that can not be reordered or purchased.

Therefore regular and proper treatment of all metal fittings on your boat is very important.
If really does pay.

Hull-underbody

If the boat stay longer than 14 days in the water, you should do an antifouling. Please take advise from a magazine which is competent to do this work also about osmosis. The bull under body has to get special maintenance. Please let advise you about all important points.

Scratches in the Gelcoat

As at all other boat factories.

Scratches in de gelcoat are not a point of guarantee.

Most scratches can be traced back to improper treatment.

As: jumping on the boat
Touch against the jetties
Falling on the boom
And several other Subjects.

Gelcout scratches can be repaired easily be everybody. We would like to advise you, or to repair the scratches at the yearly inspection.

Comments to the control of quality

The ODIN yachts are built under a strict quality control. At the ship yard in Polen there is a German specialist looking for that the tules of the German Lloyd are observed. High qualitiy of material is worked out in best workmanship.
Every ODIN-Yacht is controlled by Mr. Palarz, the owner of the shipyard, before leaving. We congratulate you to your decision to sail the ODIN, and wish you always happy sailing.