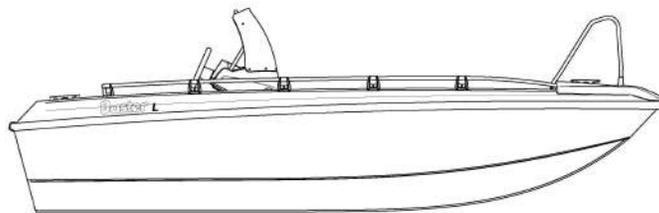




## **OWNER'S HANDBOOK**

### **BUSTER L**

**2010**



Inha Works Ltd.  
Saarikyläntie 21, FI-63700 Ähtäri  
tel. +358 6 5355 111

Your authorised Buster dealer:

## **PREFACE**

Dear Buster owner! Thank you for choosing a Finnish Buster boat and we hope you will have many enjoyable experiences on board.

This handbook aims to help you use your boat safely and with peace of mind. It includes details of the boat itself, the equipment and systems installed in it, and information about how to operate and maintain it. Before you start using your boat, we urge you to first familiarise yourself with it by reading this handbook thoroughly.

Naturally, the Owner's Handbook cannot provide you with seamanship skills or information on boating safely. If the Buster is your first boat, or you have changed to a type of boat with which you are unfamiliar, for the sake of your comfort and safety, please acquire sufficient handling and operating experience before you take on the responsibility of command. The seller of the boat, a boat club, or national motorboat and yachting associations will gladly tell you about local boating schools or recommend competent teachers.

Before taking out your boat, ensure that its design category is appropriate for the prevailing wind and sea conditions and that you and your crew are capable of handling it in the existing conditions. The wind conditions and swells in which design category C can be used include gales and heavy winds, which come with an exceptional risk of high waves and gusts. Only a competent and fit crew can satisfactorily handle such dangerous conditions, and can do so only in a well-maintained boat.

This Owner's Handbook is not a detailed guide to maintenance or fault diagnosis. If a problem occurs, please contact your nearest Buster dealer. If repairs are needed, use only those businesses recommended by a Buster dealership. Alterations that affect the safety characteristics of a Buster boat can be carried out only with the written approval of the manufacturer, who cannot be held responsible for changes to the boat that it has not approved.

In some countries driving a boat requires a licence or some other similar authorisation.

Always maintain your boat in good condition and bear in mind the consequences of wear resulting from ageing, rough treatment and improper use. Any boat, no matter how strong, can be significantly damaged by improper use. Always adapt the speed and course of your boat in relation to the conditions at sea.

If your boat is equipped with a life-raft, read its operating instructions thoroughly. The boat should have on-board safety equipment (life-jackets, safety harnesses, etc.) appropriate to the boat type, weather conditions, etc. In some countries such equipment is mandatory. The crew must be familiar with the operations of all safety equipment and emergency manoeuvres (rescuing a man overboard, towing, etc.). Rescue exercises are regularly organised by boating schools and clubs.

Every person on board should use an appropriate flotation aid (such as a life-jacket or vest). Note that in some countries the law requires flotation aids to be used at all times while on board.

STORE THIS HANDBOOK IN A SAFE PLACE AND HAND IT OVER TO THE NEXT OWNER WHEN YOU RELINQUISH THE BOAT.

I Owner	
First name: _____	Surname: _____
Residence: _____	
Year of purchase: _____	

II Owner	
First name: _____	Surname: _____
Residence: _____	
Year of purchase: _____	

III Owner	
First name: _____	Surname: _____
Residence: _____	
Year of purchase: _____	

IV Owner	
First name: _____	Surname: _____
Residence: _____	
Year of purchase: _____	

V Owner	
First name: _____	Surname: _____
Residence: _____	
Year of purchase: _____	

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## BEFORE DEPARTURE...

Read this Owner's Handbook thoroughly, and before departure always check:

- \* **Prevailing weather conditions and the weather forecast**  
Assess the wind conditions, the state of the sea, and visibility. Is your boat's design class, size, and on-board equipment, together with the skills of the helmsman and crew sufficient for the waterways which you intend to use?
- \* **Load capacity**  
Do not overload the boat. Distribute the load evenly, and place heavy objects as low as possible because placing them too high will reduce the boat's stability.
- \* **Passengers**  
Ensure that life-jackets or vests are available for everyone on board. Before departure, agree what duties each person will be responsible for during the trip.
- \* **Fuel**  
Check that there is enough fuel on board, including sufficient reserve to cope with bad weather and any unforeseen circumstances.
- \* **Engine and equipment**  
Check that the steering, electrical devices and battery all function properly and are in good condition. In addition, check the seaworthiness of the boat: ensure that there are no fuel or water leaks, and that there is adequate safety equipment on board, etc. Check that the level of bilge water is minimal.
- \* **Ventilation**  
Ensure that the fuel space is ventilated to minimise the risk of fire.
- \* **On-board equipment is well secured**  
Make sure all articles are properly stowed to remain in place in the event of heavy seas and high winds.
- \* **Sea charts**  
Unless you are fully acquainted with the route, that you have charts for the waterway which you intend to use.
- \* **Manoeuvring during departure and arrival**  
The crew should agree on who is to be responsible for casting off each rope, etc. During departure and arrival ensure that mooring or other lines do not get entangled in the propeller.

For further instructions concerning the engine, see the manufacturer's instruction manual.

# 1 General

This Owner's Handbook will help to familiarise you with the characteristics of your new boat. Instruction manuals for equipment fitted to the boat are also included and are frequently referred to. You can, of course, add to this handbook by obtaining the instruction books for all other equipment. Space for your own notes has been provided at the back of this handbook.

# 2 Definitions

Warnings and specific remarks in this handbook are defined as follows:

**DANGER!:** Indicates grave danger highly likely to lead to death or permanent injury if appropriate precautionary measures are not taken.

**WARNING!:** Indicates danger which may lead to injury or death if appropriate precautionary measures are not taken.

**ATTENTION!:** Is a reminder to operate the boat in a safe manner or to bear in mind dangerous methods of operation that may lead to injury or damage to the boat or some part of it.

This handbook adopts units of measurement in accordance with the SI system. In some cases other units have been included in parentheses. An exception to this is wind speed, which is designated on the Beaufort scale as in the EU Directive on recreational craft.

# 3 Warranty

In accordance with the enclosed warranty conditions, a guarantee is provided for the boat and any equipment that has been installed in the boatyard. For post-production installations to the engine, trim tabs, compass, any navigation equipment and other devices, the manufacturer of the equipment in question is directly responsible for any issues relating to the warranty. , Separate warranty cards, together with contact information for their suppliers, are enclosed for all equipment/devices. For other issues relating to the warranty we request that you contact the Buster dealer indicated on the cover of this handbook.

## 4 Before launching

### 4.1 Registration

In some countries, it is mandatory for even small boats to be registered. Check with the local authorities in your country of residence for the statutory regulations concerning boat registration.

### 4.2 Insurance

Boat insurance may compensate for damage which has occurred on the water, during transportation or dry docking. Check separately the insurer's liability regarding hoisting the boat. Insurance can also indirectly affect safety on the water, because in the event of serious injuries it allows the essential focus to be on saving lives. Insurance companies will provide more detailed information on various insurance alternatives.

### 4.3 Training

Ample literature is available about boating. A great deal of beneficial practical information can also be had from boating clubs and from attending navigation courses. These provide a sound basis for your boating skills, though sureness in handling, navigating, mooring and anchoring a boat are best acquired by means of long practice.

## 5 Boat characteristics and operation

### 5.1 General

This Owner's Handbook is not a complete maintenance guide or repair manual. The aim of the handbook is to help owners familiarise themselves with the characteristics of their new boat as well as showing them how to use it properly.

### 5.2 Basic information about the boat

The basic information of the Buster L is as follows:

Boat model:	Buster L
Design category:	C (coastal waters)

See also paragraph 5.4 Loading.

**Design category C is defined as follows:**

**Category C:** The boat is designed to operate in conditions of up to a maximum wind velocity of 6 on the Beaufort scale (approx. 14 m/sec)

and a corresponding swell (a significant wave height of up to 2 m with occasional waves of 4 m maximum). Such conditions can occur in open water on lakes, estuaries, and in coastal waters in moderate weather.

**ATTENTION!** the significant wave height is the average height value of the upper third of the swell which roughly corresponds to an experienced observer's estimate of the wave height. Some individual waves could be twice this height.

**Main dimensions and capacities:**

The length, beam, draught, total weight, etc., and fuel tank volume of the boat are listed in Appendix 1: technical specifications.

**Manufacturer's plate:**

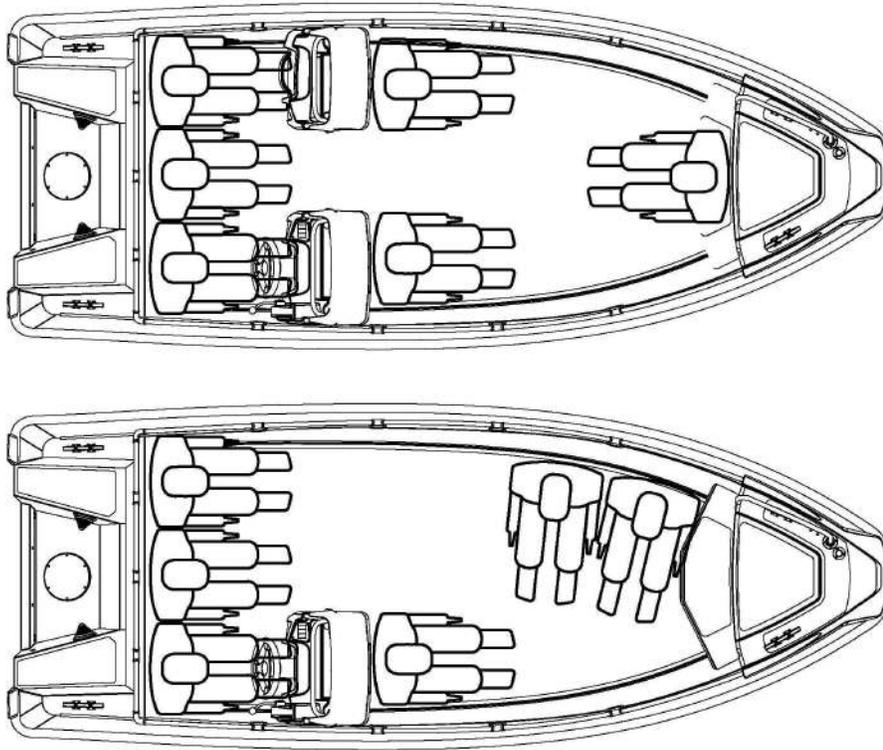
Part of the above information is recorded on the manufacturer's plate attached to the boat near the steering console. More comprehensive information is given in appropriate sections of this handbook.

## 5.3 Recommended maximum number of people on board

The recommended maximum number of people to have on board the boat is six. Designated seating arrangements are shown in Diagram 1.

**WARNING!**

Never exceed the maximum recommended number of people on board. Irrespective of the number of people on board, the total weight of people and equipment must never exceed the recommended maximum load (see paragraph 5.4 Loading). Always use the seats in the boat. If your boat is not equipped with seats for six people, everyone on board must sit in the designated seating places as shown in the diagram.



*Diagram 1. Seating for the maximum number of people on board*

## 5.4 Loading

The recommended maximum load capacity for the Buster L is 450 kg.

An adult's weight is taken to be 75 kg and a child's 37.5 kg. In addition to the above-mentioned recommended maximum load, the boat can be loaded with the following weights: 10 kg of basic equipment and a total weight of 40 kg of fuel in the boat's fixed tank.

**WARNING:**

When loading your boat never exceed the recommended maximum load. Pack the boat carefully and distribute the load evenly in order to maintain the design trim (approx. even keel). Avoid storing heavy weights at too high an elevation.

## 5.5 Engine and propeller

The largest recommended engine capacity for the Buster L is 37 kW (50 hp)

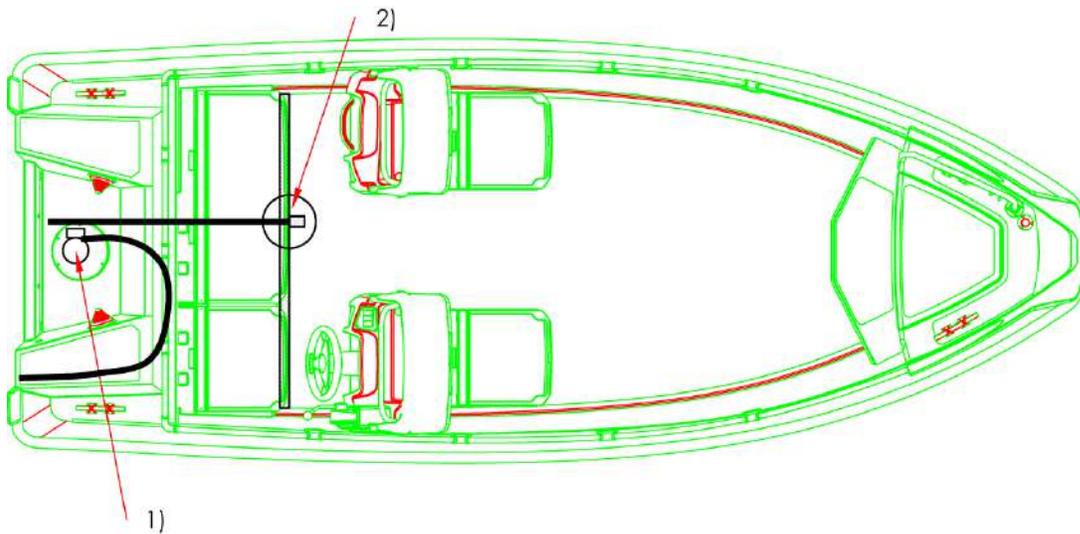
When fitting the engine and choosing a propeller, comply with the engine manufacturer's instructions.

## 5.6 Preventing water getting on board and stability

### 5.6.1 Hull and deck openings

The location of deck openings and their respective plugs are shown in Diagram 2.

The Buster L has an outlet for draining rain water from the cockpit. This outlet is meant to be plugged if you observe water flowing back into the cockpit through the drain outlets when the boat is loaded. In other situations, the drain outlets should be kept open and regularly cleared to prevent them from getting blocked with debris. The boat has a drain plug in the aft section screwed to the lower corner of the transom, through which the boat can be drained when docked or loaded on a trailer.



*Diagram 2. Location of outlets, cut-off valves and bilge pump: 1) Automatic bilge pump; 2) Cockpit drain plug for draining rainwater.*

### 5.6.2 Bilge pumps and drainage

The Buster L is equipped with an electrically-operated, automatic bilge pump, the location of which is shown in Diagram 2. It discharges water that has collected in the bilge whenever the surface sensor detects its presence. The draining capacity of the electrical bilge pump is approx. 38 l/min. The automatic pump is in a constant state of readiness independent of the position of the main power switch, provided that the accumulator is connected. The bilge pump is activated when the sensor is fully submerged for five seconds and is deactivated when the sensor is dry. The pump can also be force-fed by activating the springloaded switch on the switch panel.

The bilge pump has been positioned as close to the bottom plate as is practicable. Even so, a small amount of water inevitably remains in the bilge where it cannot be discharged by the pump. However, this water can be drained off through the drain outlet on the right-hand side of the boat's transom.

The suction head of the electrically-operated bilge pump should regularly be checked and cleared of debris that may have accumulated there. Access to the pump is through the service hatch in the engine well.

**WARNING!** The bilge pump system is not designed to deal with leaks resulting from running aground or leaks that occur as a result of other damage.

**ATTENTION!** Check the operation of the bilge pump at regular intervals. Clear any debris from the end of the pump's suction hose.

### 5.6.3 Stability and buoyancy

The stability of a Buster is excellent thanks to the hull form and weight distribution. Even so, beware of large breaking waves which always represent a serious danger to stability.

Note that your boat's stability will be compromised if any additional weight is placed too high in the boat. All changes resulting from positioning bulky objects can significantly influence the stability, trim, and performance of your boat. If you intend to make such changes, please first contact the manufacturer of the boat.

The amount of water in the bilge should be kept at a minimum as the free movement of water in the boat always decreases stability.

Stability can also be diminished when towing or being towed.

The Buster L is equipped with pontoons to help the boat carry loads, as defined in paragraph 5.4, even when the boat has filled with water.

## 5.7 Prevention of fire and explosions

### 5.7.1 Engines and fuel systems

The Buster L has reserved spots for two slip tanks under the rear seat. Before refuelling, switch off the engine. Do not smoke while refuelling and otherwise avoid naked flames. To fill the slip tank, it must be lifted out of the boat to avoid any fuel getting into the bilge in the event of the fuelling procedure resulting in an overflow. Do not use any electrical devices while refuelling.

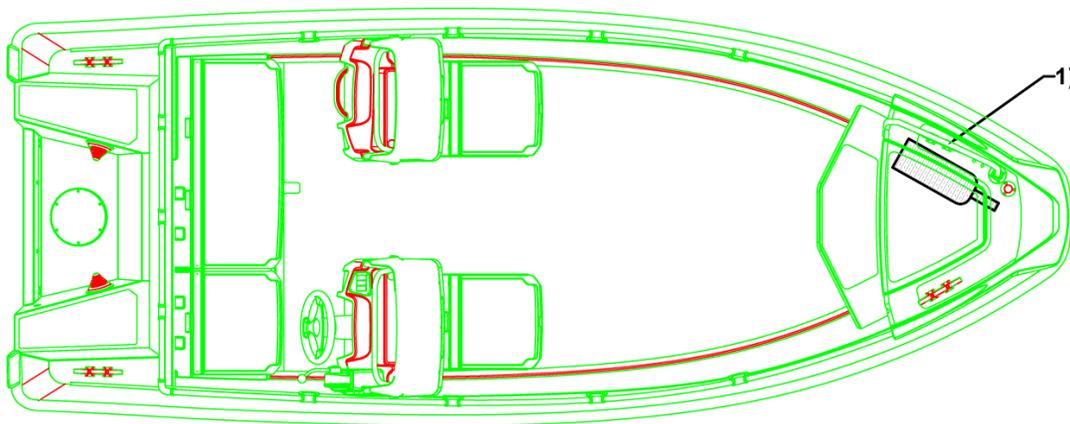
Do not keep canisters of reserve fuel in any unventilated space or loose in the boat, or any equipment containing petrol in a place not designed for it. The designated places for the fuel tanks are shown in Appendix 2: Buster L overall arrangements.

At least once a year, check that there has been no wear and tear in the fuel feed pipes.

The fuel tanks must be fastened in place with the on-board straps to prevent them from moving around. When moving the fuel tanks, close the air screws to avoid leaks, but be sure to open the screw of the tank that is being used to avoid prevent the engine from choking.

### 5.7.2 Fire extinguishing and fire prevention

Buster L is equipped with a 2-kg hand-held powder extinguisher with a fire rating of 13A89BC (Diagram 3). The extinguisher is located in the storage space on the left-hand side of the prow. Its position is indicated by a clearly visible symbol in the cockpit.



*Diagram 3. 1) Hand-held fire extinguisher 13A89BC (2 kg)*

Hand-held fire extinguishers must be serviced annually. Extinguishers more than ten years old are not approved unless the pressure chamber has been re-tested. When changing hand-held fire extinguishers, they should be replaced by a device with a minimum fire rating of 8A68B.

Ensure that the fire extinguishing equipment is easily accessible when the boat is loaded. Tell all crew members the location of the equipment and how to operate it.

Keep the bilge clear of fuel and regularly check for possible fuel leaks. The smell of petrol is a sure sign of a fuel leak.

### Never

- obstruct access to safety equipment, for example, to the extinguisher and the main power switch of the electrical system. Before using the boat, always remember to unlock the padlock of the storage space (for the extinguisher).
- block any of the boat's ventilation openings, such as the ones in the lower edge of the rear seat, which are designed to vent any fuel vapour.
- make alterations to the boat's electrical or fuel systems or permit any unqualified person to make changes to any system on the boat.
- detach the fuel line from the slip tank when the engine is running, e.g. to change tanks.
- fill the fuel tank or otherwise handle fuel when the engine is running.
- smoke or light any naked flame while handling fuel.

## 5.8 Electrical system

The circuit diagram for the electrical systems of the boat is shown in Appendix 3.

The main power switch is located inside the rear seat on the left side of the boat. The circuitry functions when the switch key is turned clockwise into a horizontal position. When the key is in a vertical position, the circuitry is off. However, the automatic bilge pump is always functional when connected to the battery.

Switches for control and electrical devices are located as shown in Diagram 4.

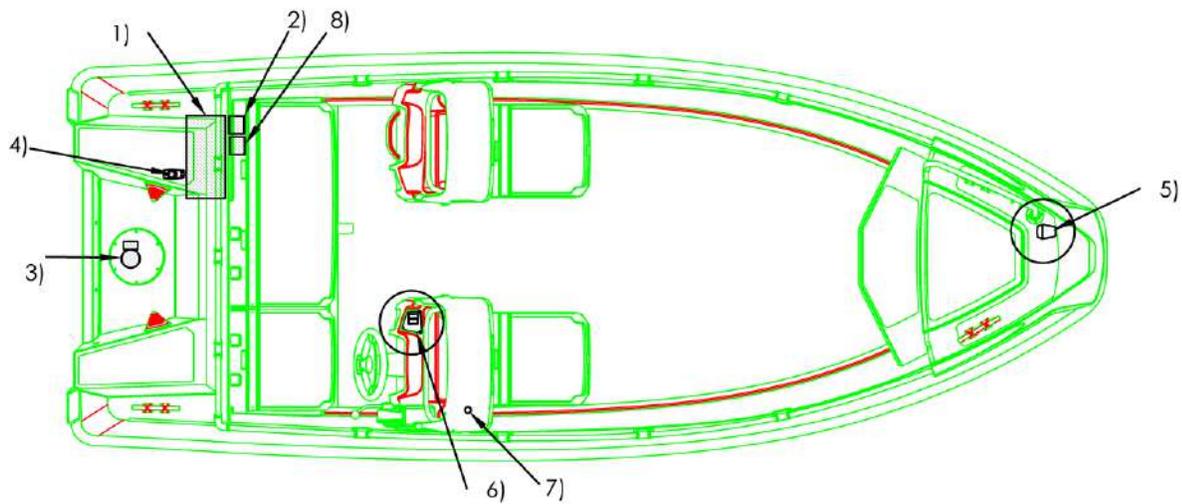
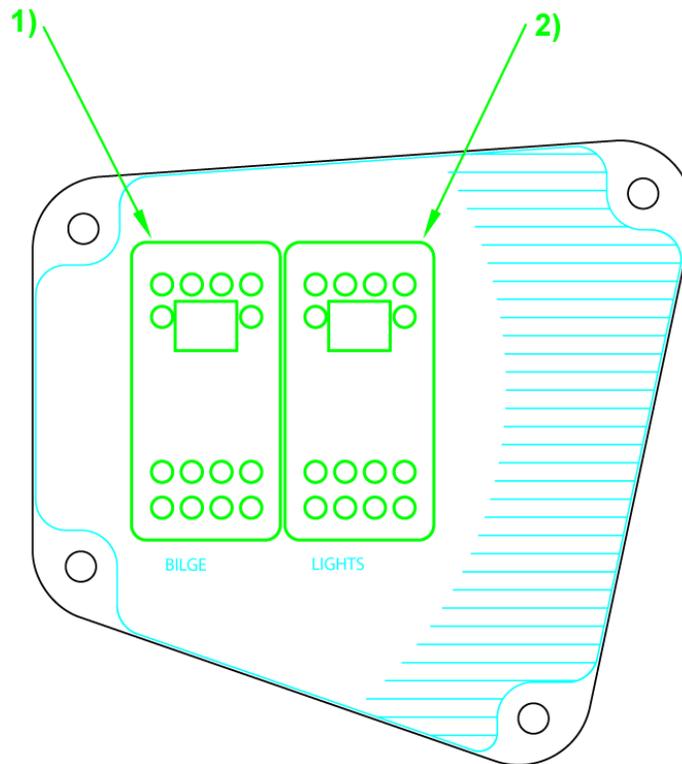


Diagram 4. Location of electrical devices:

- 1) Accumulator housing;
- 2) Main power switch;
- 3) Bilge pump;
- 4) Mast light (detachable), white 360°;
- 5) Navigation light (detachable), with colour sectors;
- 6) Switch panel (see Diagram 5.);
- 7) Power outlet, 12V DC, 10A;
- 8) Fuse box (see Diagram 6.)



*Diagram 5. Switch panel; 1. Operating switch for bilge pump; 2. Navigation light switch*

Circuit fuses are located next to the main switch in a separate fuse box inside the rear seat on the left side of the boat. The Buster L uses automatic fuses which can be reconnected after overloading by pushing the tripped pin back down. In the electrical system, there are two extra circuits equipped with fuses (Extra 1 5A and Extra 2 10A). Accessories installed post-production can be connected to these. The leads for these circuits are behind the switch panel on the steering pulpit. Do not replace normal fuses with fuses intended for a higher current feed. Similarly, do not install as part of the electrical system components which exceed the nominal ampere value of the respective circuit.

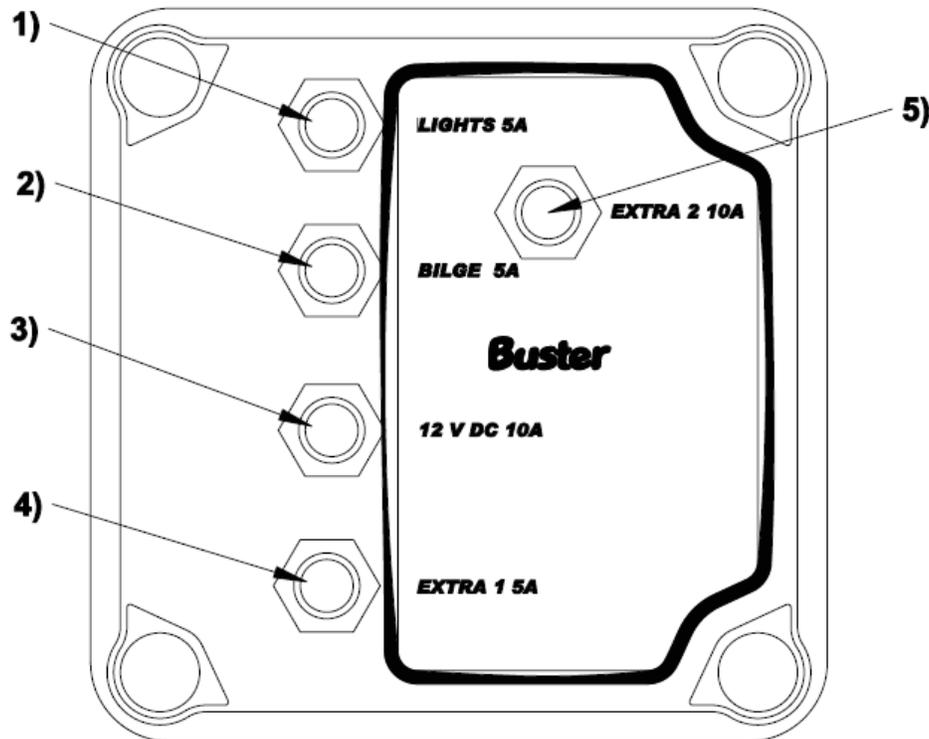


Diagram 6. Fuse box: 1) Navigation lights 5A (A+); 2) Bilge pump 5A (C++); 3) Power outlet 10A (12V+); 4) Extra circuit 5A (X1); 5. Extra circuit 10A (X2).

When leaving the boat unattended for a long period, switch off the current at the main switch. Also switch off the power when carrying out electrical installations. However, the boat's automatic bilge pump remains functional and can be switched off only by detaching the battery's terminal lead (+).

To remove the battery, open the rear seat's knurled-head screws and pull the seat out for a distance equalling the length of its mounting place. Next, open the battery housing's fastening strap and pull out the battery housing from under the rear left platform. If the rear seat must be removed from the boat entirely, detach the fuse box and main switch from the seat by unscrewing the surrounding 4 knurled-head screws. When you connect or disconnect the battery, take care not to simultaneously touch both terminals of the accumulator or the aluminium surfaces of the boat with a metal tool such as, for example, a spanner.

Charge the battery only with the engine or with a battery charger. Charging with too high a current can lead to an explosion.

**ATTENTION!**

Never switch off the power at the main switch while the engine is running.

Do not alter the boat's electrical system or any diagrams associated with it. Changes and service must be carried out by qualified electricians specialised in marine electrical systems.

## 5.9 Control characteristics

### 5.9.1 Driving at high speeds

The recommended maximum engine output for the Buster L is 37 kW (50 hp).

Do not use a boat with an engine that has a greater output than that which is indicated on the manufacturer's plate.

Most engines feature electro-hydraulic power trims. The basic rules for adjusting the engine's power trim are:

- When raising the boat to plane, go to the 'bow down' position.
- When the boat is planing, and in a moderate swell, raise the bow until the boat begins to buck, and the propeller loses its grip (ventilates) or the engine approaches the upper limit of the normal area of adjustment. Thereafter, lower the prow slightly until the boat stabilises. The power trim can be optimised with the aid of the log.
- In a counter swell, lower the bow for a smoother ride. In a favourable swell, and in a very high counter swell, raise the bow slightly so that it does not dive (submerge).
- Do not drive the boat at high speed when the engine power trim is at a negative angle – i.e. with the bow low – as the boat may heel and the steering become unstable.

Also see the instruction manual for the engine.

The outboard engine is normally intended to be installed at a height where the engine's cavitation plate is at the same elevation as the keel of the boat.

**WARNING!** At high speeds, adjust the power trim with care, as it radically changes the behaviour of the boat. Do not drive with the bow too low as the boat can suddenly deviate from its path.

**WARNING!** Rapid turns can lead to loss of control. Reduce speed before sharp turns in whatever direction you are going.

**WARNING!** Waves reduce the boat's controllability, causing it to heel. Bear this in mind and reduce speed in a rising swell.

Learn the rules of navigation, from books and courses, and follow them. Also observe the requirements of COLREG (Convention on the International Regulations for Preventing Collisions at Sea). Navigate carefully and use new or updated sea charts.

Always adjust your speed in accordance with prevailing conditions and the environment. Bear in mind:

- the state of the sea (ask your passengers for their opinions on a comfortable speed)
- your own wake (greater when rising to plane, smaller at displacement speed, i.e., below 6 knots). Observe prohibitions associated with a swell. Reduce your

speed and your wake as a matter of courtesy, and also for the safety of yourself and others.

- visibility (islands, fog, rain, blinding sun).
- knowledge of the route (time required for navigation).
- narrowness of the route (other traffic in the waterway, noise, and the effect of backwash on the shoreline).
- the space needed for coming to a halt and for evasive manoeuvres.

### 5.9.2 Dead-man's grip

Attach the line for the dead-man's grip to yourself as soon as you have cast off the mooring rope. Read the more detailed instructions in the engine manual. Particularly when driving alone, it is very important that the boat stops, if for any reason you have fallen overboard or stumble while on board. However, to avoid unintentionally turning off the engine during landing manoeuvres, remember to detach the line from your hand beforehand.

#### **DANGER!**

A rotating propeller is extremely dangerous for anyone who has fallen overboard or to a swimmer. Switch off the engine until the swimmer or water-skier has climbed back on board.

### 5.9.3 Visibility from the steering position

In beautiful and calm weather, driving is simple provided you keep a sharp lookout, which also complies with the requirements of COLREG. Always take care to have the best possible visibility from the steering position:

- Position passengers so that they do not limit the field of vision.
- Do not drive continuously at planing threshold speed, as the rising prow impedes visibility.
- Use the engine's power trim and possible trim tabs to adjust the boat's position in such a way that the rising prow does not obstruct visibility.
- Remember also to look astern in case of approaching vessels, particularly while boating in shipping lanes.

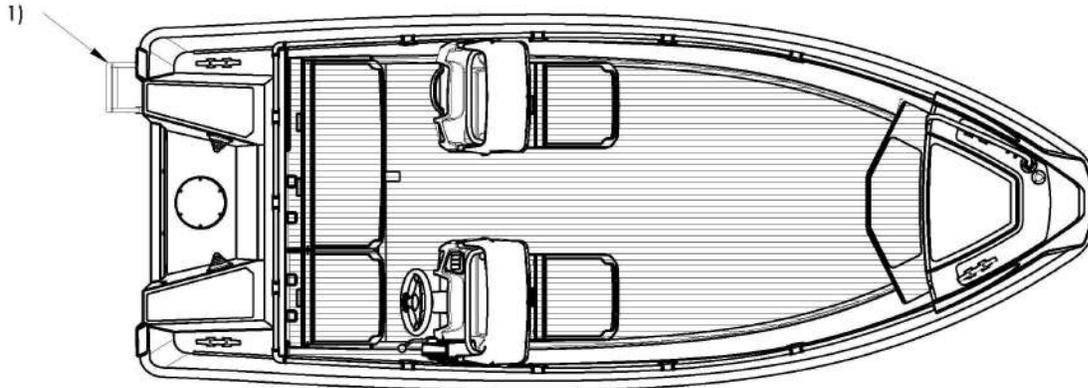
At the approach of darkness and in any situation with limited visibility (fog, heavy rain, etc.) use the navigation lights. Their switch is located on the steering pulpit. Install both aft and prow light masts.

## 5.10 Good seamanship – other recommendations and instructions

### 5.10.1 How to avoid falling overboard and procedures for getting back on board

The boat's work areas are marked on Diagram 7. Do not sit, stand or walk on other parts of the boat while it is in motion.

If someone falls overboard the easiest way to get back on board is via the swim ladder at the stern, which can also be pulled down by the person in the water. Remember to switch off the engine as the swimmer approaches the boat.



*Diagram 7. Location of work decks (defined areas) and swim ladder (1).*

### 5.10.2 Securing loose equipment

Secure all weighty items, such as the anchor, in place before departure. Bear in mind that wind and turbulence can easily snatch away lighter objects.

### 5.10.3 Respect for the environment

Shorelines everywhere (sea and lakes alike in all countries where Buster boats are sold) are a precious natural resource and their preservation is a matter of honour for all sailors. Therefore avoid

- fuel and oil leaks
- disposing rubbish and waste in the water or on the shoreline
- discharging washing detergents or solvents into the water
- loud noise on the water and in harbours
- generating backwash, especially in narrow passages and shallow waterways.

Pay special attention to local environmental laws and regulations. Familiarise yourself with international regulations on preventing the contamination of the marine environment (MARPOL) and comply with them as far as possible.

#### 5.10.4 Anchoring, mooring and towing

Always anchor your boat carefully even in sheltered spots, as conditions can change suddenly. The mooring line should be equipped with a spring-loaded device to cushion the effect of jerking. See the attaching points in Diagram 8. Do not use other parts of the boat for mooring, towing, or anchoring. Use sufficiently large fenders to avoid chaffing and friction.

The eyelet on the prow is meant for docking on a slipway or mounting on a trailer, not for pulling the boat sideways when mooring to a jetty. The boat also has a thief-proof, hardened-steel eyelet attached to the foredeck, which is intended for a locking chain only and should not be used for any purpose other than locking the boat.

The strength of the attaching points is also shown in Diagram 8. It is the responsibility of the owner/user to ensure that mooring, towing and anchor ropes, anchor chains and anchors are appropriate for use on the boat and that the breaking strength of the ropes and chains does not exceed 80% of the strength of the corresponding attaching point. However, rope wear and knots that weaken the strength of ropes should also be kept in mind.

When anchoring in a natural harbour, ensure that the depth of the water is sufficient and that you drop the anchor at a sufficient distance from the shore. A reasonable grip can be achieved when the rope is 4–5 times the water depth. The grip also gets better the more the rope is extended. Grip improves significantly if the first 3–5 metres of the anchor rope is weighted rope or chain.

**WARNING!**

Do not try to stop the boat's motion by using your hand or placing your hand or foot between the boat and the jetty, the shore, or another boat. Practise mooring and anchoring in good conditions and use engine power with restraint but resolutely.

**ATTENTION!**

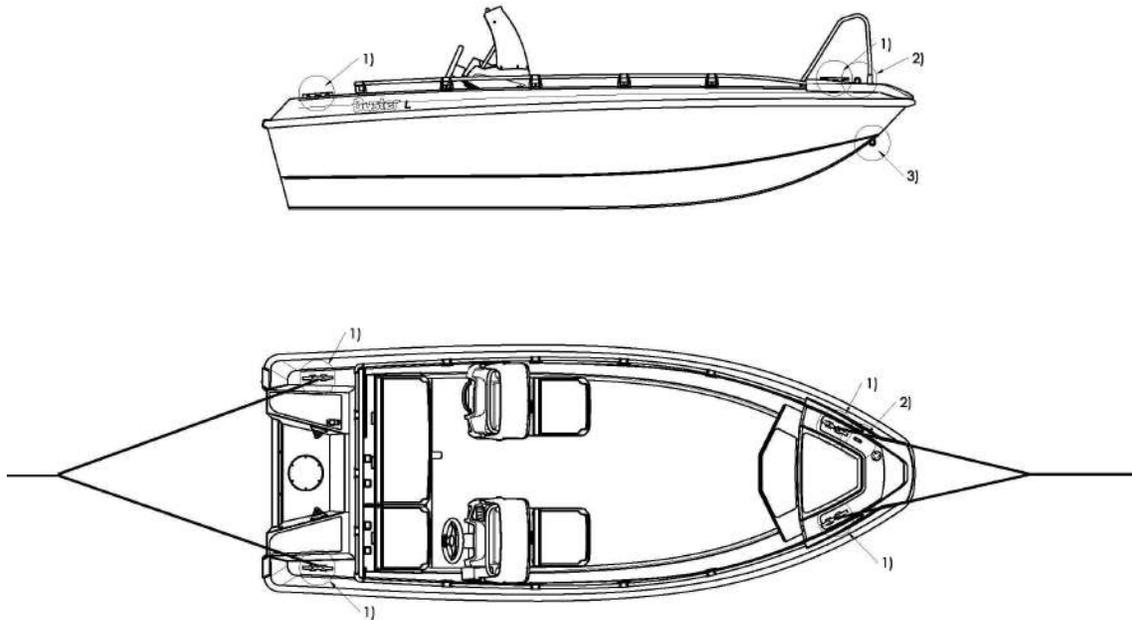
When mooring your boat, always bear in mind wind change, tidal effects, backwash from other boats, etc. Further information can be had, for example, from your insurance company.

When towing another boat, use a sufficiently strong, floating tow rope. Initiate the towing procedure carefully, avoid jerks, and do not overload the engine. Take care to keep the towing rope from entangling in the propeller. If you are towing a small dinghy, adjust the length of the tow rope so that the dinghy rides the wake of your boat favourably. However, in narrow channels and in a heavy swell tow the dinghy close to the transom so as to minimise the twisting motion. Securely batten down the equipment in the dinghy in case it capsizes. In a swell in open water, cover the dinghy to avoid it filling with splash water.

If you tow another boat, or your boat needs to be towed, attach the tow rope as per the attaching points shown in Diagram 8.

**WARNING!**

A tow rope is subject to high tension. If it snaps, the recoiling speed at the breaking point can be highly dangerous. Always use a sufficiently thick rope and stay well clear of it.



*Diagram 8. 1) attaching points for towing, anchoring and mooring to a jetty, (attaching point strength is 13.3 kN); 2) locking chain attaching point (hardened steel eyelet); 3) trailer eyelet.*

### 5.10.5 Trailer towing

The boat weight of the boat, with the engine and accumulator, is 500-520 kg. This does not include fuel and equipment load. Before lifting your Buster boat onto a trailer, make sure the trailer is appropriate for the boat, the support is adequate to minimise the load at each individual point, the bow stop assembly is in a suitable position in relation to the trailer's axle and that the trailer's carrying capacity is sufficient for the boat, its engine, equipment, battery, all boating accessories and the fuel load. The maximum permitted gross weight for a trailer is given on your car registration papers.

Remove unnecessary load and drain the bilge before lifting the boat onto the trailer. Adjust the side supports of the trailer so that the keel supports bear most of the weight of the boat and the side supports keep the rolling sideways. Raise the boat onto the trailer only by utilising the towing eyelet on the prow of the boat – the other attaching points cannot bear the weight of the boat when lifting. Fasten the boat securely to the trailer before transportation. Protect the boat by attaching suitable padding between the fastening straps and the hull. Check instructions related to trailer transportation in the engine manual.

**ATTENTION!** The trailer should be slightly front-weighted. Ensure that the boat is firmly fastened to the trailer and that its weight is evenly distributed along the trailer supports. During transportation a swaying boat will buffet against the supports and damage the hull.

**WARNING!** In terms of carrying capacity, an inadequate or poorly maintained trailer can break down during transportation and be dangerous. Ensure the load capacity of the trailer is sufficient for the weight of the boat, its engine, fuel, and all equipment.

## 6 Service, repairs and winter storage

Information about maintenance, winter storage, service and repairs can be found on the internet at <http://www.busterboat.com> or provided by your nearest Buster dealership.

Major damage to the aluminium surface or other surfaces should always be repaired by an authorised Buster dealership.

In the event of engine defects or faults in other devices, contact the supplier of the device in question.

**ATTENTION!** Surface treated fastening accessories are used in Buster L boats to prevent paint damage due to galvanic corrosion. If any of the screws are removed, they must be replaced with new ones. Using screws other than surface-treated Buster screws will immediately void the warranty.

**ATTENTION!** If not properly carried out, many post-production installations and alterations can cause structural damage to the boat or compromise safety. Contact the manufacturer before you or anyone else on your behalf carries out, for example, new groundings, hatches, or equipment installations, or attaches other metal alloys to the aluminium surface of the boat.

## Appendices

### APPENDIX 1: TECHNICAL SPECIFICATIONS

The boat has a consecutive series number, or CIN code (Craft Identification Number). The code is shown on the hull of the vessel on the right-hand side of the stern, on the exterior of the transom next to the moulding strip. For your own information, record the CIN code in the following table. When dealing with the boatyard or dealer, tell them the CIN code and boat type so as to facilitate delivery of the correct spare parts.

Type:	Buster L	
CIN code:	FI-BUSR	
Engine brand and model:		
Engine series number:		
Hull material of boat:	marine aluminium EN AW-5754 H14 (AlMg3)	

## BOAT'S TECHNICAL INFORMATION

<b>Buster L</b>	
<b>MAIN DIMENSIONS</b>	
Length overall, m	5,04
Hull length, m	5,04
Max. beam, m	1,98
Weight, unloaded, kg	375
Max. total weight, kg	1030
<b>CARRYING CAPACITY</b>	
Recommended max. number of people	6
Recommended max. load, kg **)	500
<b>TANK CAPACITIES</b>	
Pontoon foam, l	642
<b>PERFORMANCE</b>	
Recommended max. engine output, kW (hp)	37 (50)
Performance at max. output, knots	30
<b>ELECTRICAL SYSTEM</b>	
Voltage	12 V DC
Recommended battery capacity, Ah	55
<b>CONTROL CABLES</b>	
Steering cables, m (ft)	3,30 (11)***)
Remote control cables, m (ft)	2,10 (7)***) 3,60 (12) ****)

\*) The maximum overall weight is the boat's unloaded weight plus the maximum recommended load. In addition to this, the weight of the engine, battery and incidental loads are permitted.

\*\*\*) When loading, only the following are considered as incidental loads:

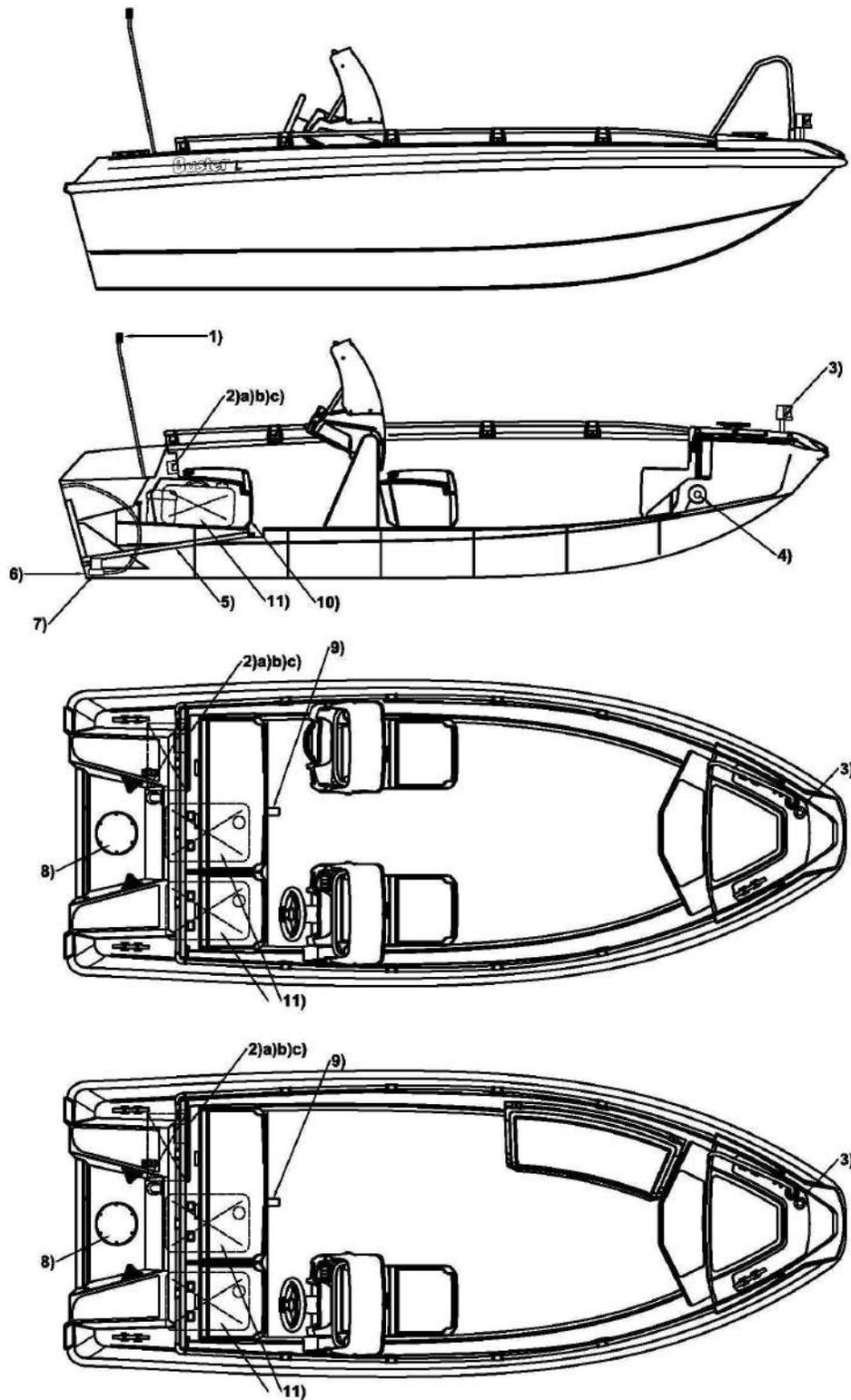
<b>INCIDENTAL LOADS</b>	
Total weight of people on board, kg	450
Basic equipment, kg	10
Contents of fixed fuel tanks, kg	40

\*\*\*) In side consoles

\*\*\*\*) In pulpits

Due to the production process, there may be small variations in the main dimensions and volumes.

## APPENDIX 2: BUSTER L OVERALL ARRANGEMENT DIAGRAM



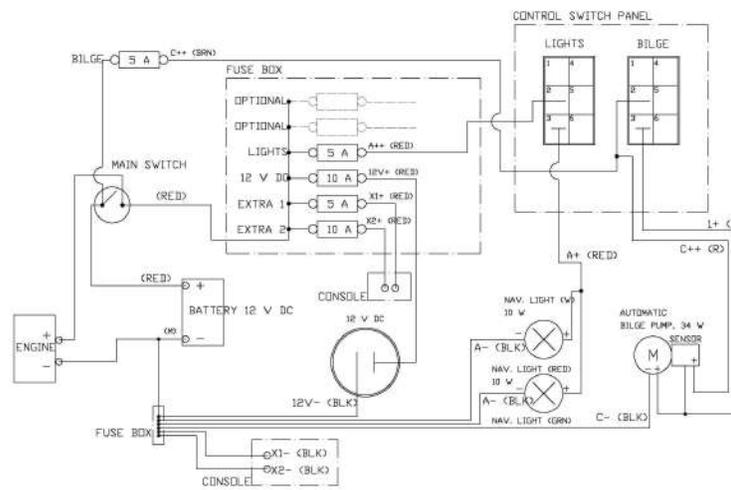
*Buster L*  
*Legend on page 26*

The overall arrangements of the diagrams are not to scale. Because of the modular nature of the fittings available for the boat, the boat may not be equipped with all the fittings shown. Due to continuous product development, the manufacturer assumes no responsibility for possible variations.

#### REFERENCE NUMBER LEGEND

- 1) Mast navigation light; visible all-round, white, output 10W
- 2) a) Battery housing; b) fuse box; c) main power switch
- 3) Navigations lights; 112,5° (red) and 112,5° (green), output 10W
- 4) Powder fire extinguisher 13A89BC (2 kg)
- 5) Cockpit draining hose
- 6) Stern drain plug
- 7) Bilge pump
- 8) Service hatch for bilge pump
- 9) Cockpit draining well
- 10) Tank space ventilation openings
- 11) Reserved space for fuel tank

### APPENDIX 3: CIRCUIT DIAGRAM FOR ELECTRICAL SYSTEM



Circuit diagram for *Buster L*. Symbols and terminology on page 28.

#### SYMBOLS AND TERMINOLOGY

(RED)	Red lead
(BLK)	Black lead
(BRN)	Brown lead
(GRY)	Grey lead
BILGE	Electrical bilge pump
LIGHT W	Mast light 360° white
LIGHT R/G	Navigation light, red and green 112.5°/112.5°
BATTERY	Battery
ENGINE	Engine
MAIN SWITCH	Main switch

Due to continuous product development, the manufacturer assumes no responsibility for possible variations in the circuit diagram.



## APPENDIX 4: DECLARATION OF CONFORMITY

### DECLARATION OF CONFORMITY

The Recreational Craft Directive 2003/44/EC

#### MANUFACTURER

Manufacturer's name:	Inha Works Ltd
Address:	Saarikyläntie 21
Postal code:	FI-63700
Town:	Ähtäri
Country:	Finland
Module adopted:	B

#### AUTHORITY NOTIFIED

Name:	VTT
Identification code:	0537
Address:	PO Box 1000, Kemistintie 3
Postal code:	FI-02044 VTT
Town:	Espoo
Country:	Finland

#### RECREATIONAL CRAFT INFORMATION

Make and model of boat:	Buster L
Design category:	C - coastal
Type inspection and certificate no:	VTT-C-4465-10-boat-001-09
Boat type:	Open, single-hull outboard motorboat
Construction material:	Aluminium alloys
Maximum engine capacity, kW:	37
Length/width/draught, m:	5.05/1.98/0.20

References to appropriate uniform standards and regulations are listed overleaf.

I declare that the abovementioned recreational boat complies with all appropriate and essential safety requirements in accordance with both the specifications overleaf and the EC type examination certificate.

Juha Lehtola, Managing Director  
Date (30/06/09):

<b>General requirements</b>		
	Basic information	EN ISO 8666:2002
A2.1	Hull markings	ISO 10087:1996 / A1:2000
A2.2	Manufacturer's plate	RCD annex I, 2.2
A2.5	Owner's Handbook	EN ISO 10240:2004
<b>Arrangements and equipment</b>		
A2.3	Prevention of falling overboard	EN ISO 15085:2003
A3.7	Stowing life raft	-
A3.8	Emergency exit	-
A3.9	Anchoring, mooring and towing	EN ISO 15084:2003
A5.7	Navigation lights	1972 COLREG
A5.8	Prevention of emissions and discharges	-
<b>Installations</b>		
A5.1	Engines and engine space	-
A5.2	Fuel system	EN ISO 11105:1997
A5.3	Electrical system	EN ISO 10133:2000, ISO 8846:1990
A5.4	Steering system	EN ISO 28848 + A1:2000
A5.5	Gas equipment	-
A5.6	Fire prevention	EN ISO 9094-1:2003
<b>Dimensions</b>		
A3.1	Structure	RSG Guidelines, NBS-VTT Extended rule
<b>Hydrostatics</b>		
A3.2	Stability and freeboard	EN ISO 12217:2002
A3.3	Buoyancy	EN ISO 12217:2002
A3.6	Maximum permitted load	EN ISO 14946:2001/AC 2005
A3.4	Hull and deck openings	EN ISO 9093-1:1997
A3.5	Filling with water	EN ISO 15083:2003, ISO 8849
<b>Drive characteristics</b>		
A4	Drive characteristics	EN ISO 11592:2001, EN ISO 8665:2006
A2.4	Visibility from the steering position	RSG Guidelines, EN ISO 11591:2000
B1	Motor identification	-
C1	Noise levels	-

- = is not relevant for the security of the particular boat model, or the system in question is not used in the boat.