BRIG
RIGIDINTELLIGENTBOATS

CE

# OWNER'S MANUAL

## RIGID INFLATABLE BOAT

SERIE: ***NAVIGATOR***

MODEL: ***Navigator 22***

2388N.01

Design Category: C
Directive 2013/53/EU

**CONTENTS**

**DANGER LEVELS.**

The manual contains warnings, identified as follows:

**⚠ DANGER** Denotes that an extreme intrinsic hazard exists which would result in high probability of death or irreparable injury if proper precautions are not taken.

**⚠ WARNING** Denotes that a hazard exists which can result in injury or death if proper precautions are not taken.

**⚠ CAUTION** Denotes a reminder of safety practices or directs attention to unsafe practices which could result in personal injury or damage to the craft or components or to the environment.

**INTRODUTIONS.**

This owner's manual has been compiled to help you to operate your craft with safety and pleasure. It contains details of the craft; the equipment supplied or fitted, its systems and information on their operation. Please read it carefully, and familiarize yourself with the craft before using it.

This owner's manual is not a course on boating safety or seamanship. If this is your first craft, or if you are changing to a type of craft you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before "assuming command" of the craft. Your dealer or yacht club will be pleased to advise you of local sea schools, or competent instructors.

This owner's manual is not a detailed maintenance or trouble-shooting guide. In the case of difficulty, refer to the boat builder or his representative.

Always use trained and competent people for maintenance, fixing or modifications. Modifications that may affect the safety characteristics of the craft shall be assessed, executed and documented by competent people. The boat builder cannot be held responsible for modifications that he has not approved.

In some countries, a driving license or authorization are required, or specific regulations are in force. Always maintain your craft properly and make allowance for the deterioration that will occur in time and as a result of heavy use or misuse of the craft.

Any craft, no matter how strong it may be, can be severely damaged if not used properly. This is not compatible with safe boating. Always adjust the speed and direction of the craft to sea conditions.

If your vessel is equipped with a liferaft, carefully read the operating instructions. On board the vessel there should be appropriate security equipment depending on the type of vessel, the features of its use and weather conditions.
The crew should be familiar with the use of all equipment for ensuring safety and maneuvering in emergency situations.

A recommended list of security equipment is given below:

- life jackets
- anchor
- manual bailing device for removing water from the boat (bucket, hand pump)
- oars and boat hook
- day-and-night visual distress signal
- first aid kit
- waterproof flashlight
- set of local navigation charts
- whistle or non-electric horn
- mooring and towing ropes
- tool kit
- portable AM/FM radio or weather radio
- means of communication with emergency rescue services
- means of reboarding
- fire extinguisher

You must understand that it is your responsibility to keep safety equipment in proper condition.

PLEASE KEEP THIS OWNER'S MANUAL IN A SECURE PLACE, AND HAND IT OVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT.

**CE CERTIFICATION.**

The CE marking indicates that the boat meets the requirements of the Recreational Craft Directive 2013/53/EU with design category, as marked on the builder's plate.
To use the boat for another purpose (commercial, professional or other), certification of the relevant authorities for these purposes is required.

**Certifying Body:**

INTERNATIONAL MARINE CERTIFICATION INSTITUTE
Rue Abbe Cuypers 3 / B-1040 Bruxelles / Belgique
Notified Body : 0609
www.imci.org

**Name of Manufacture:**

BRIG Ltd.
88 Lozivska str. Dergachy 62303
317 Shevchenko str. Kharkiv 61033
UKRAINE
www.brigboats.com

Explanations of design categories are given below:

**Design Category A**: This craft is designed to operate in winds that may exceed wind force 8 (Beaufort scale) and in significant wave heights of 4 m and above (see Note below), and is largely self-sufficient. Abnormal conditions such as hurricanes are excluded. Such conditions may be encountered on extended voyages, for example across oceans, or inshore when unsheltered from the wind and waves for several hundred nautical miles.

**Design Category B**: This craft is designed to operate in winds up to Beaufort force 8 and the associated wave heights (significant wave height up to 4 m, see Note below). Such conditions may be encountered on offshore voyages of sufficient length, or on coastal waters when unsheltered from the wind and waves for several dozens of nautical miles. These conditions may also be experienced on inland seas of sufficient size for the wave height to be generated.

**Design Category C**: This craft is designed to operate in winds up to Beaufort force 6 and the associated wave heights (significant wave height up to 2 m, see Note below). Such conditions may be encountered in exposed inland waters, in estuaries, and in coastal waters in moderate weather conditions.

**Design Category D**: This craft is designed to operate in winds up to Beaufort force 4 and the associated wave heights (occasional maximum waves of 0,5 m height). Such conditions may be encountered in sheltered inland waters, and in coastal waters in fine weather.

NOTE : The *significant wave height* is the mean height of the highest one-third of the waves, which approximately corresponds to the wave height estimated by an experienced observer. Some waves will be double this height.

**BEAUFORT Wind Scale and Corresponding State of the Sea**

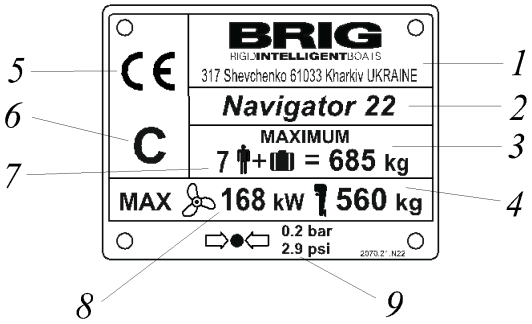
| Beaufort Number | Denomination | Wind speed in Knots | Wind speed in m/sec | State of the sea | Significant wave height in meters |
|---|---|---|---|---|---|
| 0 | Calm | <1 | 0-0.2 | Calm | 0 |
| 1 | Light Air | 1-3 | 0.3-1.5 | Calm | 0 |
| 2 | Light Breeze | 4-6 | 1.6-3.3 | Almost calm | 0.2 |
| 3 | Gentle Breeze | 7-10 | 3.4-5.4 | Almost calm | 0.2 |
| 4 | Moderate Breeze | 11-16 | 5.5-7.9 | Small waves | 0.5 |
| 5 | Strong Breeze | 17-21 | 8.0-10.7 | Large waves | 1.25 |
| 6 | Fresh Wind | 22-27 | 10.8-13.8 | Large waves | 2.0 |
| 7 | Strong Wind | 28-33 | 13.9-17.1 | Very large waves | 2.5 |
| 8 | Gale | 34-40 | 17.2-20.7 | Rough sea | 4 |
| 9 | Strong Gale | 41-47 | 20.8-24.4 | Very rough sea | 6 |
| 10 | Storm | 48-55 | 24.5-28.4 | Heavy | 9 |
| 11 | Violent Storm | 56-63 | 28.5-32.6 | Very heavy | 14 |
| 12 | Hurricane | 64 and over | 32 and over | Stormy | 14 and over |

**IDENTIFICATION PLATES.**

**⚠ CAUTION**

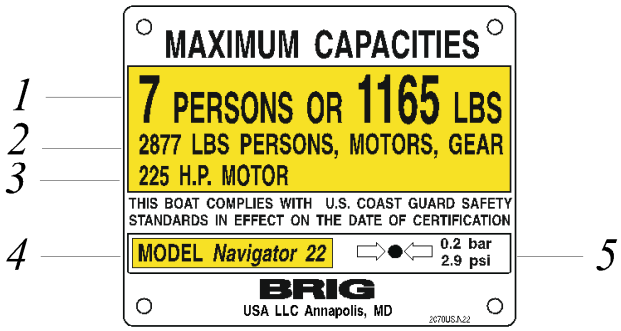
***It is fundamental for the plates to be aboard the boat, since they are only form of recognition and identification. Without them the boat does not comply with the legislation in effect. The plates must never be removed. Any tampering or removal not authorised by the manufacturer is the full responsibility of the owner.***

*Builder's plate*. Installed on the hull of the boat near the stern seat.




1 - Manufacturer's name and contact address of the manufacturer
2 - Model name
3 - Maximum recommended load (including mass of the persons and cargo onboard, but excluding mass of the max motor(s), the mass of the contents of fixed fuel and water tanks when full)
4 - Maximum mass of the outboard(s) including controls and batteries
5 - CE mark
6 - Design Categories according to Directive 2013/53/EU
7 - Maximum recommended persons' capacity (75 kg each)
8 - Maximum outboard(s) power rating (in kW)
9 - Nominal pressure for each inflatable buoyancy chambers

*Builder's plate for the American market only.*




1 - Maximum number of persons and their total weight based on 165 lbs each
2 - Maximum load capacity (total weight on board including persons, motor(s), gear), when the fuel and water tanks are full
3 - Maximum motor(s) power
4 - Model name
5 - Nominal pressure for each inflatable buoyancy chambers

*Plate with identification number.* Installed on the hull of the boat, on the transom side, starboard side.

**UA-QRK12345A021**

«UA» - manufacturer country code
«QRK» - Manufacturer Identification Code (MIC)
«12345» - boat serial number
«A021» - boat production date

**TECHNICAL SPECIFICATIONS.**

| | |
|---|---|
| Model name | *Navigator 22* |
| Design Categories according to Directive 2013/53/EU | C |
| Length (without engine) | 6.60 m |
| Beam | 2.70 m |
| Height (without / with T-Top) | 2.07 / 2.66 m |
| Inflatable tube diameter, max. | 0.55 m |
| Cockpit dimensions ( length X width ) | 4.86 x 1.55 m |
| Deadrise on transom / in middle section | 21° / 22.5° |
| Transom height | 625 mm |
| Number of separate inflatable buoyancy chambers | 5 |
| Nominal pressure for each inflatable buoyancy chambers | 0.2 bar (2.9psi) |
| Maximum number of persons (75kg each) | 7 |
| **Engine:** | |
| Recommended motor(s) power | 200HP (149kW) |
| Maximum motor(s) power | 225HP (168kW) |
| Maximum motor(s) weight (including controls and batteries) | 560 kg |
| Motor(s) shaft length | 1 x 25" or 2 x 20" |
| **Weight parameters:** | |
| Weight of empty boat (with steering console, with seats, without motor, without fuel) | 935 kg |
| Weight of boat with max.equipment from manufacturer without motor | 1010 kg |
| Displacement in Light Craft Condition (LCC) | 1515 kg |
| Maximum total load (ML) (total mass of the liquids in tanks, mass of the persons and cargo onboard) | 870 kg |
| Maximum recommended load (including mass of the persons and cargo onboard, but excluding mass of the max motor(s), the mass of the contents of fixed fuel, water tanks when full) | 685 kg |
| Loaded displacement mass (LDC) | 2385 kg |

**Weight sheet (kg).**

| | |
|---|---|
| Empty boat : | 900 |
| Basic equipment envisaged in the standard version by the manufacturer: | 35 |
| Mass of the maximum outboard motor(s) recommended by the builders: | 560 |
| Security equipment: fire fitting equipment, security material (without life raft), warning signals, flags, radio VHP mobile phone. | 20 |
| **Displacement in Light Craft Condition: LCC =** | **1515** |
| Total mass of passengers (10persons), 75 kg per body: | 525 |
| Consumables fuel, oil at the maximal tank capacity: | 145 |
| Consumables fresh water at the maximal tank capacity: | 40 |
| Alimentation, additional equipment and load if applicable: | 10 |
| Optional equipment (T-Top, Arch): | 85 |
| Life rafts : | 65 |
| **Maximum total load: ML =** | **870** |

**Loaded displacement mass: LDC = LCC + ML**

| | |
|---|---|
| **LDC =** | **2385** |

All indicated dimension have a tolerance of +/- 3%, the indicated weight parameters have a tolerance of +/- 5%.

**⚠ WARNING**

***When loading the boat, never exceed the maximum recommended load. Always load the boat carefully and distribute loads appropriately to maintain design trim (approximately level). Avoid placing heavy weights high up.***

**⚠ CAUTION**

***You must be sure that you clearly and unambiguously understand the meaning of all parameters of the boat. Contact your BRIG dealer for clarification.***

## MAIN DIMENSIONS.

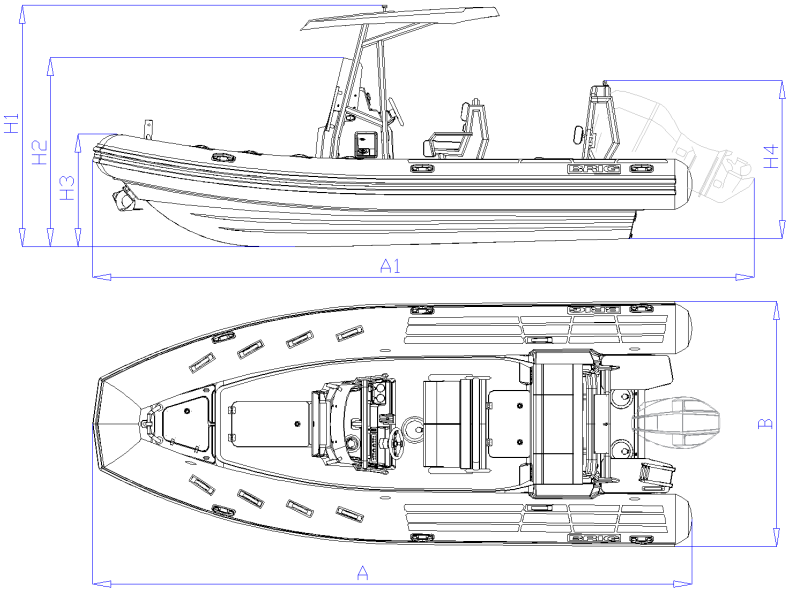



Fig.1

The dimensions of the *Navigator22* comply with the data specified in the Fig.1.
All dimension measurements indicated have a tolerance of +/- 3%.
The length of the boat with the motor is shown conditionally. It can vary depending on the angle of the motor deflection.

| | |
|---|---|
| Length (without motor): | A = 6.60m |
| Length (with motor): | A1 = 7.24m |
| Beam: | B = 2.70m |
| Max.height with T-Top: | H1 = 2.66m |
| Max.height with console: | H2 = 2.07m |
| Max.height with tube: | H3 = 1.24m |
| Max.height with arch: | H4 = 1.75m |

**BOAT GENERAL VIEW.**

On the Fig.2 you can see the maximum installed equipment for the *Navigator22*, which may differ from the configuration of your boat.

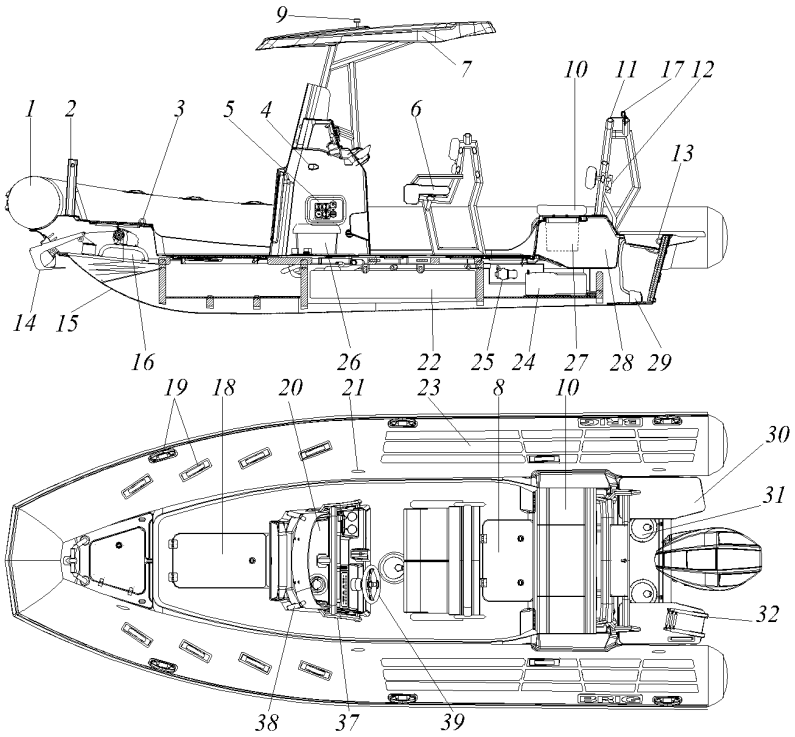



Fig.2

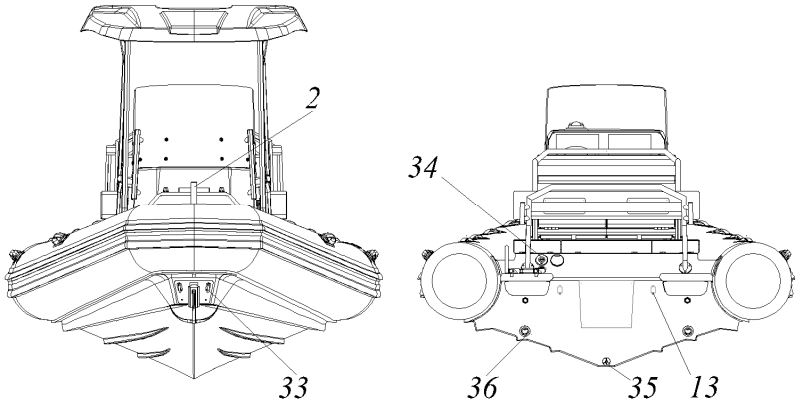



Fig.2

1- buoyancy tube
2- bow cleat
3- bow lifting eyes
4- navigation lights
5- main battery switches
6- helm seat / bolster
7- T-top
8- rear deck locker
9- all round white navigation light
10- stern seats
11- arch
12- stern cleats
13- aft lifting eyes
14- anchor with electric windlass
15- rigid hull
16- anchor compartment
17- water-ski tow hook
18- bow deck locker
19- handles
20- steering console
21- inflate valves
22- fuel tank 190L
23- anti-slip pads
24- fresh water tank 39L
25- fresh water pump
26- battery box
27- two aft stern lockers
28- stern locker
29- bilge pump
30- rear platforms
31- inspection hutches
32- foldable ladder
33- bow tow eyes
34- neck for fresh water fill
35- drain plug
36- cockpit drain sockets
37- neck for fuel fill and fuel tank vent
38- handrail
39- steering  pump/steering wheel

**CREW LIMIT.**

The number of persons ondoard is limited. The maximum possible number of persons is indicated in the technical data and on the builder's plate.
Always check that the each person onboard are sitting in the designated seating area. On the picture (Fig.3) you can see the recommended location of the crew onboard. All persons should always use the handholds to avoid falling overboard. Person indicated in the Fig.3 as “F”, must use the handle under the seat.

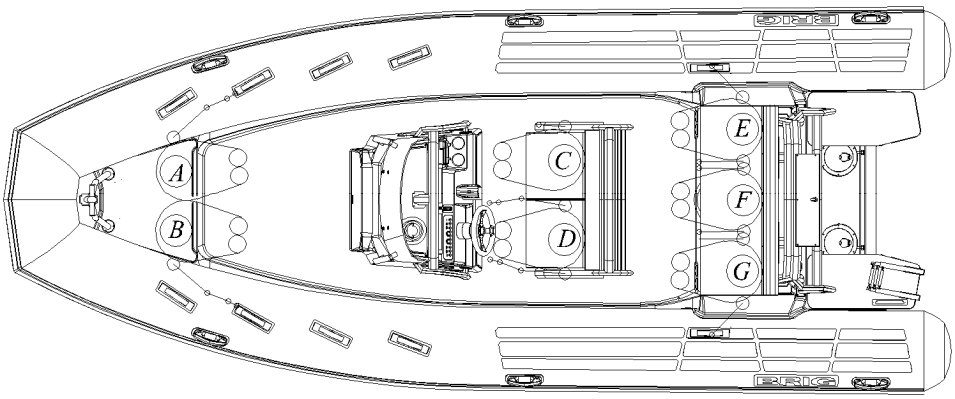



Fig.3

**⚠ WARNING**

***Before using the seats for persons “E”, “F”, “G” check the reliability of closing the locks of the seats. Unclosed locks can result in personal injury and / or damage to the seats.***

**⚠ WARNING**

***Never exceed the crew limit.***

**⚠ WARNING**

***Always check the correct and safe accommodation of persons onboard.***

**⚠ WARNING**

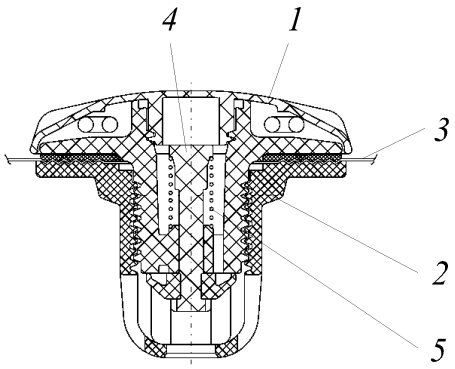
***Reduce speed when persons are sitting on the buoyancy tube.***

**⚠ WARNING**

***Periodically check the handholds.***
***There should be no damage on the handholds and their fixation.***
***Defective handholds can cause injury.***

**BUOYANCY TUBE.**

The buoyancy tube is made of HYPALON (Du Pont registered trademark) coated fabric or PVC coated fabric. The buoyancy tube of the boat has of five independent airtight compartments. Each compartment has an inflation valve. You can see the valve design on the Fig.4.




Inflation valve.

1 – cap
2 – valve body
3 – tube material
4 – spindle
5 – S.S. spring

Fig.4

INFLATION / DEFLATION OF THE BUOYANCY TUBE.

Before inflation it's necessary to set all valves in operating condition. For it open the valve cap 1 (Fig.4), press spindle 4 (Fig.4) with your finger and rotate it clockwise until the spindle will be fixed in upper position.
Fill the tube with air using the pump from the complete set. First fill two rear compartments, next two middle compartments. However, do not increase the pressure up to its nominal value (the tube will be completely straightened). After that, fill the front compartment up to the nominal pressure. The nominal pressure value is 0.2 bar (2.9 psi). Fill the remaining compartments with air to the nominal pressure. Having completed filling, close the valves caps 1 (Fig.4).

In order to discharge air from the tube compartments, open the valve cap, press spindle 4 (Fig. 4) with your finger and rotate it anticlockwise until the spindle will be fixed in lower position.

**⚠ WARNING**

***Do not use compressors and / or other types of equipment not approved for inflating the boat tube.***

**⚠ WARNING**

***The rated pressure value is 0.2 bar (2.9 psi).***
***Check the tube pressure before every navigation.***
***Note that when the tube is heated by sunlight, the pressure can increase significantly.***
***If the tube pressure more than nominal, deflate the tube slightly.***
***Boat exploitation with pressure more / less than nominal may damage the tube.***

**⚠ WARNING**

***Be careful when mooring or navigating near rocky shores.***
***Tube can be damaged with sharp objects.***
***Always have on board the means for repairing the punctures and small cuts of the tube.***

SERVICING.

The buoyancy tube needs minimal maintenance.
Regularly inspect the tube for damage, abrasions, scoring. If such is found, immediately repair the damage with the help of qualified specialists.
Avoid spilling gasoline, oil, chlorine-based detergents, solvent cleaners and other aggressive fluids on the tube and inflation valves. If this happens, immediately rinse the tube with clean water using a soft sponge.
Do not allow dirt or marine growths on the tube. Wash the tube with clean water or use only certified detergents.

**STEERING CONSOLE.**

You can see the main components of the steering console in Fig.5

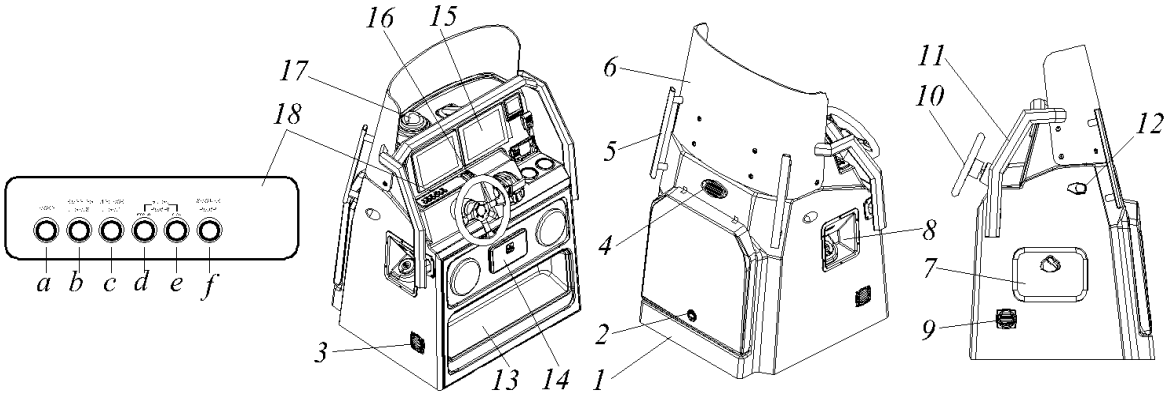



Fig.5

1- console body
2- front hatch with lock
3- inlet ventilation of the fuel tank compartment
4- electric horn
5- front handles
6- windscreen
7- niche with main switches (battery disconnectors)
8- outer neck for fuel fill and fuel tank vent
9- ventilation hole of the inner console compartment
10- steering wheel, engine remote control
11- handrail
12- navigation lights
13- footstep
14- glove box, USB and 12V sockets
15- dashboard
16- windlass control switch
17- compass
18- panel with switches:
***a***- horn
***b***- navigation lights (red and green)
***c***- anchor light (white all-round)
***d***- ***e-*** bilge pump *1* (manual and auto mode)
***f-*** shower pump (fresh water)

SERVICING.

The steering console needs minimal maintenance.
Regularly inspect the console body and windscreen for damage, abrasions, scoring. If such is found, immediately repair the damage with the help of qualified specialists.
Avoid spilling gasoline, oil, chlorine-based detergents, solvent cleaners and other aggressive fluids on the windscreen. If this happens, immediately rinse the windscreen with clean water using a soft sponge.
The windshield is made of acrylic plastic. Wash the windscreen with clean water or use only certified detergents.

**⚠ WARNING**

***Chips and / or cracked windscreen can cause injuries.***

**⚠ WARNING**

***A clean windscreen gives you good field of vision from the helm position.***

**⚠ WARNING**

***Always lock the front hatch when the boat is in motion. An open hatch can cause injury.***

**⚠ WARNING**

***Do not dispose bulky objects in front of the venting holes.***
***Do not obstruct  venting holes at any time.***
***Never locate heavy objects on the venting hoses. It will be cause of bucking, distortions and damages.***

**HELM SEAT and CUSHIONS.**

You can see the main components of the helm seat in Fig.6

The seats (1) can be used in two positions: as a seat and as a bolster.

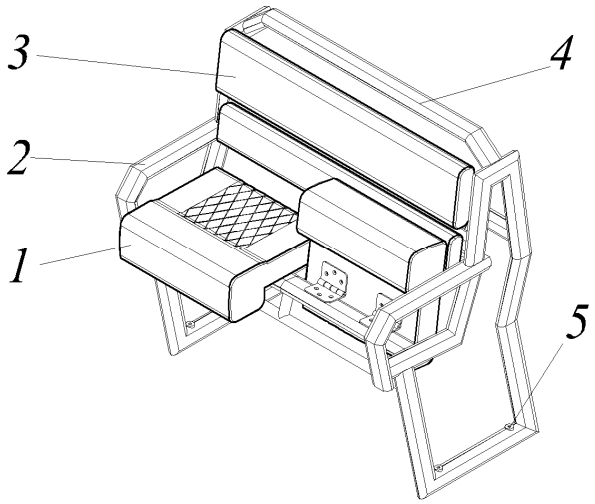



Fig.6

1- seats / bolster
2- seat body
3- backrest
4- handhold
5- seat mounting bolts

SERVICING.

The seat body is made of aluminum tubes with a special anti-corrosion coating. To prolong the lifespan of your seat, regularly inspect the seat body and handrails for damage, abrasion and scoring. If found, contact qualified personnel to repair the damage.
Do not spill gasoline, oil, chlorine-based detergents, solvent-based cleaners, or other corrosive liquids on the seat body. If this happens, immediately rinse the surface with clean water or use only certified detergents with a soft sponge.

Your boat cushions upholstery is made of marine quality coated fabrics collection ***SILVERTEX®***. Manufacturer - ***SPRADLING®*** company. For more information on the care and maintenance of this fabric, you can find on the manufacturer's website or contact your BRIG dealer.

**⚠ CAUTION**

Cover your boat when not in use.
Allow adequate venting when using a cover, to avoid trapping moisture and reduce the effect of UV, which can damage the surfaces of the boat (carpet, upholstery, inner foam of the cushions, gelcoat) over time. Refrain from stowing wet towels, all weather gear, swimsuits, etc. inside the boat.
Cabinets and lockers should be opened, if possible, to aid in air circulation.
To avoid premature aging use only approved cleaners or a cleaner that is water based. Do not use chlorine cleaners. Their negative effects can develop over time. ALWAYS CHECK ANY CLEANER BEFORE USING.
Most stains can be removed if caught early, and cleaned with a soft bristle brush and a cleaner like Dawn dish soap. Create lather and lightly scrub with the brush.

**⚠ WARNING**

***Check periodically that the seat is securely attached to the deck.***
***The mounting bolts must be tightened securely.***
***If the seat is not properly secured, this can lead to damage or injury.***

**FUEL SYSTEM.**

You can see the main components of the *Navigator 22* fuel system in Fig.7

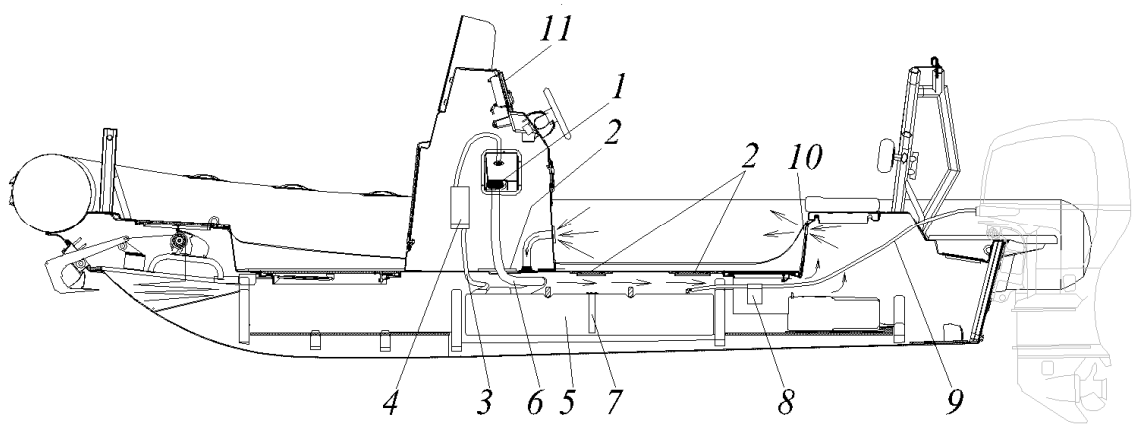



Fig.7

1 – niche with a filler neck and a fuel tank vent
2 – inspection hatches
3 – fuel tank venting hose with inner diameter 16mm (5/8")
4 – carbon canister
5 – built-in fuel tank 190L (50gal)
6 – fuel hose with inner diameter 38mm (1 1/2") (refueling fuel tank)
7 – fuel sensor
8 – fuel filter (not supplied by the manufacturer)
9 – fuel hose with inner diameter 9.5mm (3/8") (from fuel tank to outboard engine)
10 – ventilation of the fuel tank compartment
11 – fuel gauge

Refer to your engine manufacturer's operation manual for information regarding fuel information for your engine model. As an option contact your engine manufacturer's hot line or text on web with fuel related questions.
Also, additional fuel system information may be as close as your BRIG dealer.

There is a carbon canister in-line with the vent hose which functions much like the one in an automobile by filtering gas fumes. While the tank is filled, air displaced by the incoming fuel is vented through the fuel system carbon canister. Periodically check this vent screen for debris and insect activity.
The carbon canister rarely needs to be replaced and is not a serviceable item. The carbon canister has a limited lifespan. The decision to replace it is made by specialists during periodic checks of the fuel system of your boat.

The fuel fill fitting is labeled “gas” and in addition displays the international symbol. When fueling the boat keep the fill nozzle in contact with the outer neck since it decreases effects of static electricity. Always use the recommended fuel octane rating as specified in your engine owner’s manual.

A seasoned skipper will hear a distinct sound as the tank nears the “top out”.
In hot weather, gasoline in the fuel tank may expand and escape through the vent line.

**Therefore, never fill the fuel tank to 100% of its capacity.**
**We recommend filling the tank with a maximum of 165 liters (43gal).**

Be sure to tighten the fuel fill cap to prevent water and debris from entering the fill system.

Fuel filter is function to remove moisture and impurities from the fuel supply before traveling through the engine fuel system. It should be serviced periodically per the engine manufacturer’s instructions. It is a good idea to keep extra fuel filters on board along with a strap style filter wrench, catch container and clean rags for emergencies.
Never use automotive style fuel filters on your boat. Dispose of all fuel residue materials in an environmentally safe fashion. These filters are available on-line, through marinas, retail marine outlets, or can be ordered via your closest BRIG dealer.

Periodically check inlet and exhaust ventilation of the fuel tank compartment. The ventilation hoses must be fixed to the inside of the grid and run through the deck into the fuel tank compartment.

Do not store auxiliary portable fuel tanks on board the vessel since these portable tanks can emit vapors into the atmosphere through their vent.

**⚠ WARNING**

***DO NOT OVERFILL THE FUEL TANK.***
***THIS HELPS AVOID ANY OVERBOARD SPILLS WHICH MAY HARM THE ENVIRONMENT***

**⚠ WARNING**

***AVOID SERIOUS INJURY OR DEATHFROM FIRE OR EXPLOSION***
***RESULTING FROM LEAKING FUEL.***
***Always check the tightness of the fuel system.***
***There should be no fuel leaks on all components of the fuel system.***

**⚠ WARNING**

***Do not modify the fuel system yourself.***
***Any modifications, repairs, and routine maintenance of the fuel system***
***may only be performed by authorized representatives.***

**⚠ WARNING**

***Avoid any fuel spillage on the boat or in the sea.***

**⚠ WARNING**

***Do not smoke when refueling.***
***Stop the engine and switch off any electric equipments before refueling.***

**⚠ WARNING**

***Do not dispose bulky objects in front of the venting grids. Do not obstruct venting grids at any time.***
***Never locate heavy objects on the venting hoses. Insufficient ventilation of the fuel tank compartment can lead to the accumulation of gasoline vapors.***

**⚠ WARNING**

***Note that due to a possible fire or explosion danger never store flammable liquids and/or portable fuel tanks in any storage compartment aboard the vessel.***

**DRAIN SYSTEM.**

You can see the main components of the *Navigator 22* drain system in Fig.8

Drain system consists from two independent systems:

— cockpit drain system (Pos. 1,3,4);

— system for draining water from the boat's hold (Pos. 5,6,7,9).

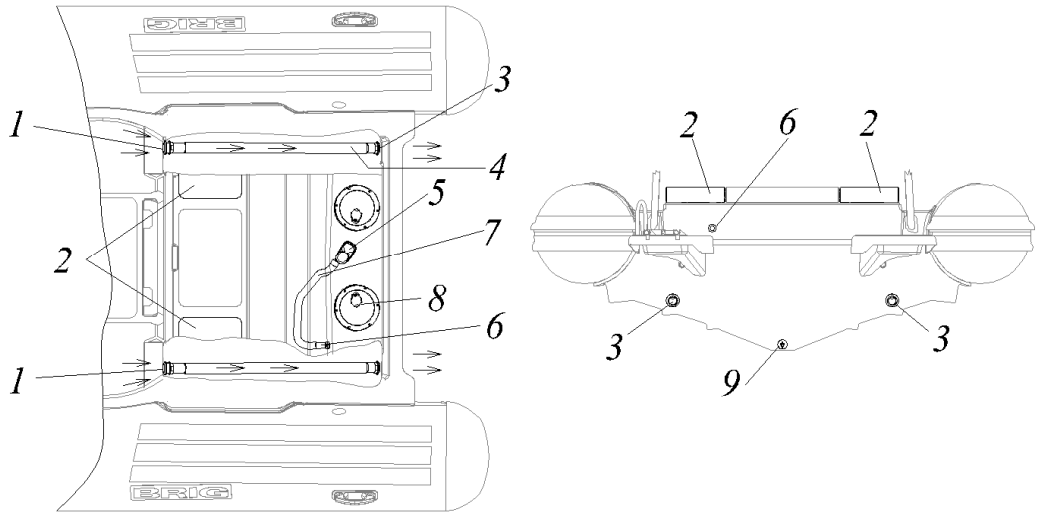



Fig.8

1- cockpit drain sockets
2- stern seats, removable lockers
3- stern drain sockets with flexible diaphragm
4- drain hoses
5- bilge pump
6- bilge pump outlet branch pipe
7- drain hose of bilge pump
8- inspection hatches
9- drain plug

How to operate with bilge pumps:
1. On the panel with switches (see steering console Fig.5) find switches of the *BILGE PUMP* .
2. Select the desired operating mode "Auto" or "Manual". The backlight of the switch indicates the activation of the selected mode. «Auto» mode: the pump will turn on when water reaches a pre-determined height in the hold, the pump will turn off when water reaches a pre-determined height in the hold. "Manual" mode: the pump run continuously as long as you hold down the switch, regardless of the presence of water in the bilge.

**⚠ CAUTION**

***Running pump without water for extended periods can lead to premature wear or damage***.

3. The bilge pump will be in the active position, even if all the battery disconnectors are turned off.
4. The drain plug (Pos.9) should ONLY be open when the boat is stored out of water.

SERVICING.

Cockpit drain system.

To inspect the system, open the stern seats (2), remove the lockers. Open inspection hatches (8).
Inspect hoses (4), cockpit drain sockets (1) and stern drain sockets with flexible diaphragm (3). There should be no damage, cracks, scuffs, water leakage into the boat's hold. Clean up debris and dirt if necessary.

System for draining water from the boat's hold.

To inspect the system, open inspection hatches (8)
Inspect hose (7), outlet branch pipe (6) and bilge pump (5). There should be no damage, cracks, scuffs.
Periodically check for bilge debris around the grate of the bilge pump.
Clean up debris and dirt if necessary. Periodically you may need to disassemble the bilge pump from the grate in order to clean or access the inner mechanisms. To remove the bilge pump, utilize the quick disconnect tabs on either side of the bilge pump, squeezing them like a backpack clip while pulling up on the pump.
Before each use of the boat, check that the bilge pump is working.
To do this, switch the *BILGE PUMP* to "Manual" mode. You should hear the characteristic pump sound. Turn off the *BILGE PUMP*.
*Recommendation:* the bilge pump operation mode "Auto" must be switched on at all times while boat in motion.

**⚠ WARNING**

***Faulty drain system may cause flooding of the boat.***

**⚠ WARNING**

***Always check the tightness of the drain system.***
***Do not allow any damage to the hoses.***
***There should be no leakage of water into the hold of the hull of the boat.***

**⚠ WARNING**

***Never locate heavy objects on the drain hoses. It will be cause of bucking, distortions and damages.***

**⚠ WARNING**

***Do not obstruct cockpit drain sockets at any time.***
***Do not dispose bulky objects in front of the cockpit drain sockets***.

**⚠ WARNING**

***DRAIN PLUG (9) (Fig.9) MUST BE TIGHTLY CLOSED WHEN BOAT ON WATER.***

**⚠ WARNING**

***Always keep the manual device for removing water from the boat***
***(bucket, hand pump) in an easily accessible place.***

**⚠ CAUTION**

***Leaving the boat for a long time with the bilge pump on (“Auto” mode) can discharge the battery.***

**FRESH WATER SYSTEM (SHOWER).**

You can see the main components of the fresh water system in Fig.9.
The water in the fresh water system is not intended for drinking.

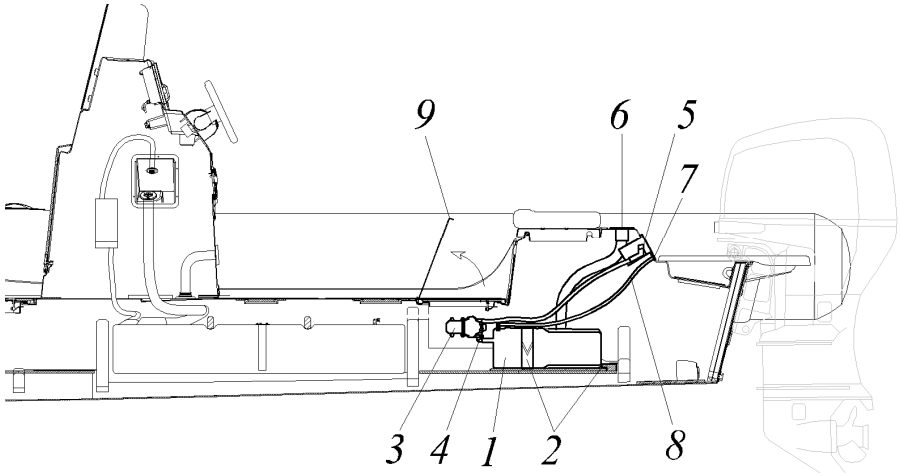


Fig.9

1- water tank 39L (10 gal)
2- tank fixing brackets
3- fresh water pump
4- water purification filter
5- shower handset with push button control and shower hose
6- neck for water fill
7- water tank ventilation nozzle
8- hose for ventilation of the water tank
9- rear deck hatch

How to operate with fresh water system:

1.Open the filler neck (6). The filler neck is labeled "Water". Fill the tank with fresh water (39L (10 gal). The water tank does not have a level sensor. The tank is completely full if water flows out of the ventilation nozzle (7) of the water tank. Close the filler neck tightly.

2.On the panel with switches (see steering console Fig.5) find switch of the ***f- "SHOWER PUMP".*** The backlight of the switch indicates the activation of the selected mode "ON". NEVER ACTIVATE THE PUMP WHEN THERE IS NO WATER IN THE WATER TANK. DAMAGE MAY OCCUR.

3. Wait a few seconds for the pump to build up water pressure in the system. You can hear the characteristic pump sound. The pump works in automatic mode. It will turn on periodically to maintain pressure in the system.

4.Open container with a shower (5). There is a marking of the container with a shower: **"FRESH WATER".** Take the shower handset and press the button on it. Water will flow as long as you hold down the button.

5. Put the shower handset back in the container after use.

6. On the panel with switches (see steering console Fig.5), turn off the switch "***SHOWER PUMP".*** When the switch is not lit, the water pump is switched off.

.

SERVICING.

To inspect the system open hatch under the left stern seat (Fig.2, Pos.10) and remove the left aft locker (Fig.2, Pos.27). Open the deck hatch (9).Inspect hoses and fresh water pump (3). Inspect the water tank and its fixing bracket. There should be no damage, cracks, scuffs. Wash (or replace) the filter (4) if necessary.There should be no water leakage from the fresh water system. If the system is not tight, the pump will run continuously trying to build up pressure.

Flush the system thoroughly periodically with fresh water to avoid mold and odor.

**⚠ CAUTION**

***Water on freezing can damage the fresh water system.***
***Water from the tank and hoses must be removed if there is a risk of freezing***.

**⚠ WARNING**

***The water in the fresh water system is not intended for drinking.***

**TOWING.**

*Boat towing.*

There is U-bolt in the bow ((1) Fig.10) of your boat for towing. On some boat modifications, two U-bolts can be installed. Use both U-bolts at the same time to tow your boat. In towing rope (2) should be a hook (3) to quickly disconnect your boat from the tugboat. This rope is not supplied by the manufacturer. You must purchase it yourself from BRIG dealers. U-bolt ((1) Fig.10) for towing is designed for a maximum horizontal load of 19.1kN.

The breaking strength of rope shall in general not exceed 80 % of the breaking strength of the respective strong point.

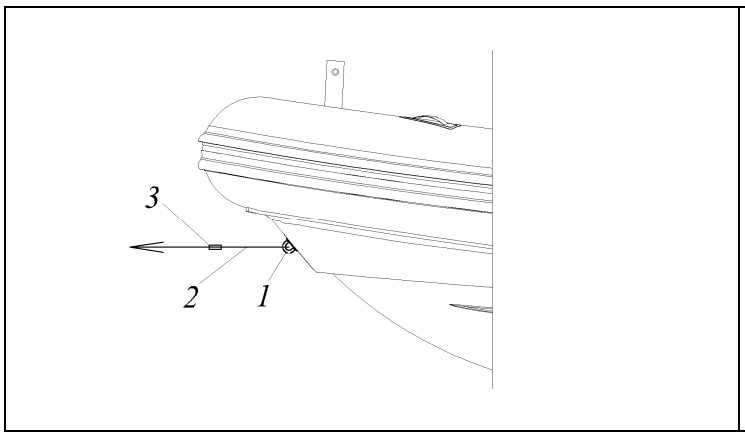



Fig.10

1- U-bolt
2- towing rope
3- quickly disconnecting hook

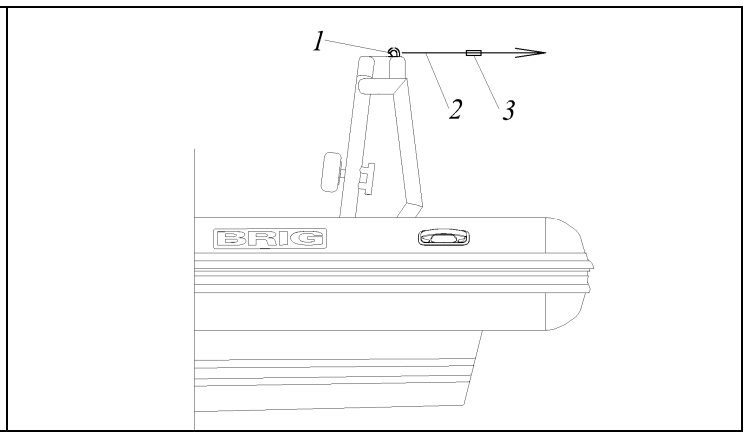



Fig.11

1- spring-locking ring
2- water-ski towing rope
3- quickly disconnecting hook

*Water-ski towing.*

Spring-locking ring is installed on the arch of your boat. That ring is designed as hook for water-ski towing rope (Fig.11).

**⚠ WARNING**

***WATER-SKI TOWING REQUIRES SPECIAL SKILLS AND ABILITIES. BE SURE THAT YOU HAVE SUCH EXPERIENCE BEFORE WATER-SKI TOWING.***

**⚠ WARNING**

***WATER-SKI TOWING.***
***THE LOAD SHOULD NOT EXCEED 400 POUNDS ( 180 KG ).***
***OVERLOADING THE SPRING-LOCKING RING MAY CAUSE INJURY AND/OR EQUIPMENT DAMAGE.***
***DO NOT PULL MORE THAN ONE PERSON AT A TIME.***
***USE SPRING-LOCKING RING ONLY FOR KNEEBOARDING, WATER SKIING, WAKEBOARDING OR WAKE SURFING.***
***SPRING-LOCKING RING WAS NOT DESIGNED AND SHALL NOT BE USED FOR TUBING, TOWING OF BOATS, PERSONAL WATERCRAFTS, FLOATING DOCKS OR ANY OTHER TYPE OF FLOATING VESSEL OR CRAFT.***
***THIS SPRING-LOCKING RING SHALL NOT BE USED FOR PULLING PARASAILING OR ANY OTHER EQUIPMENT NOT APPROVED.***
***THIS SPRING-LOCKING RING SHALL NOT BE USED TO PULL INFLATABLE WATER SPORTS TOYS OF ANY KIND.***
***NEVER LET PASSENGERS TO STAY NEAR THE ROPE ATTACHMENT POINT WHILE PULLING APPROVED WATER SPORTS ACTIVITIES.***

**⚠ WARNING**

***To tow a skier or wake-boarder, use only certified and verified towing rope.***

**⚠ WARNING**

***Do not use for towing any structural elements of the boat that are not designed for this.***

**⚠ WARNING**

***Always check the U-bolts, spring-locking ring and their attachment points for damage. There should be no cracks or other damage.***

**MOORING.**

For mooring on the boat installed (Fig.12):
1 - bow cleat, 2 – one or two (depending on configuration) bow U-bolts, 3 - two stern cleats.
If you are leaving the boat and there is a possibility of rough water or strong wind, use only bow U-bolts (2) to bow mooring.
Make sure that the mooring rope does not damage the buoyancy tube or other elements of the boat.
Rope for mooring must be appropriate strength, diameter and length.
Cleats for mooring are designed for a maximum horizontal load of 13.3kN.
The breaking strength of rope shall in general not exceed 80 % of the breaking strength of the respective strong point.

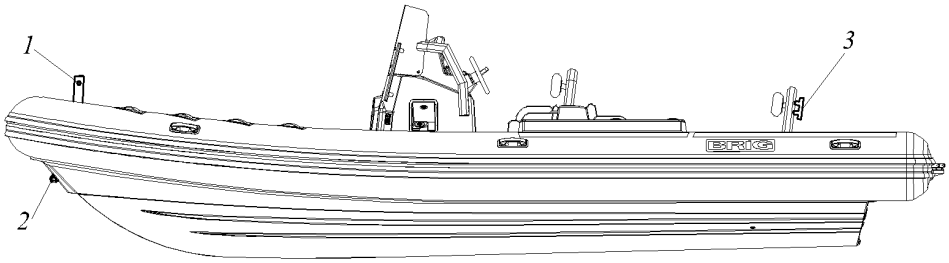



Fig.12
1 - bow cleat 2 – bow U-bolts 3 - two stern cleats

**⚠ WARNING**

***Be careful when mooring or navigating near rocky shores.***
***Tube can be damaged with sharp objects.***

**⚠ WARNING**

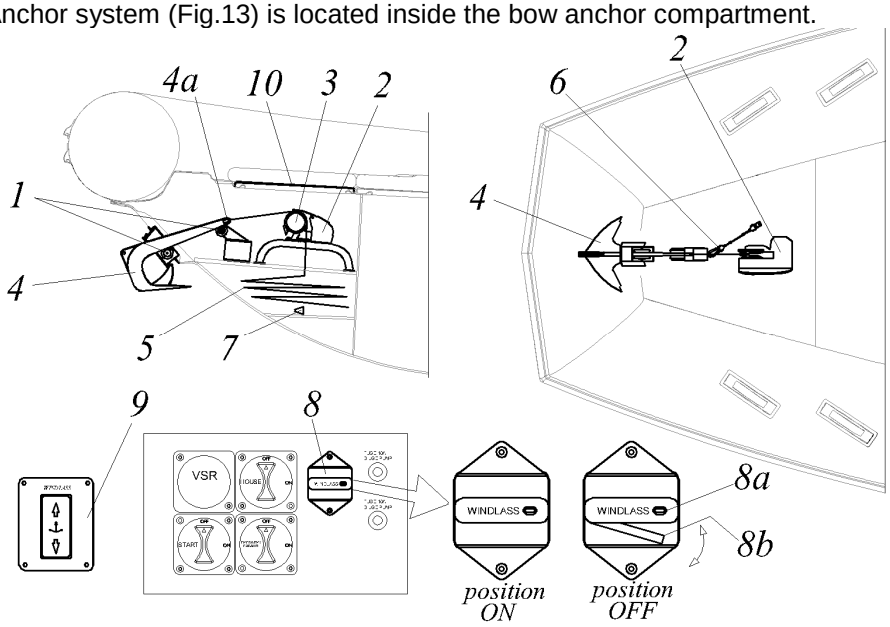
***Do not use for mooring any structural elements of the boat that are not designed for this.***

**⚠ WARNING**

***Be careful when mooring. Suddenly tensioned mooring ropes may cause injury***.

**ANCHORING.**

Anchor system (Fig.13) is located inside the bow anchor compartment.




1 - rollers
2 - electric anchor windlass
3 - clutch nut
4 – anchor “Trefoil” (7.5kg)
4a - shackle
5 - anchor line (chain / rope, 38m length)
6 - safety pin
7 - drain hole
8 - windlass circuit breaker (installed on the battery disconnector panel)
8a – button
8b – lever switch
9 - switch for control of anchor windlass ("up" and "down") (steering console, dashboard)
10 - anchor compartment hatch

Fig.13

HOW TO OPERATE WITH ANCHOR SYSTEM.

Before beginning to operate with anchor system, carefully study the owner's manual for electric windlass. Please, respect all requests and follow all instructions stated in above indicated manual.

*If you need to drop the anchor by electric windlass:*

1.Set the windlass circuit breaker (8) to the OFF position (steering console, starboard side). To do this, press the button (8a). In this case, the lever switch (8b) will move to the down position.

2.Open the bow anchor hatch (10). By means of special handle (supplied) close the clutch nut (3).

3.Disengage safety pin (6) from chain.

4.Set the windlass circuit breaker (8) to the ON position.To do this, move the lever switch (8b) to the upper position by pressing it from the bottom up until it locks.

5.By means of anchor windlass "DOWN" switch (9) (steering console, dashboard) drop the anchor.

6.After anchoring the boat, close the bow anchor hatch (10).

*If you need to raise the anchor by electric windlass:*

1.Set the windlass circuit breaker (8) to the OFF position (steering console, starboard side). To do this, press the button (8a). In this case, the lever switch (8b) will move to the down position.

2.Open the bow anchor hatch (10). By means of special handle close the clutch nut (3).

3.Check that the safety pin (6) is detached from chain.

4.Set windlass circuit breaker and battery disconnectors to the ON position.

5.By means of anchor windlass "UP" switch (9) begin to raise the anchor.

6. When the anchor will begin to crawl on a roller, stop windlass electric motor in order to make sure that the anchor is not swinging and have occupied correct position. CHECK, THAT THE ANCHOR OCCUPIED CORRECT POSITION (Fig. 14).

7.Continue to stow the anchor, until it will be fixed on a rollers.

8.Switch OFF the windlass circuit breaker (8).

9.Hook safety pin (6) to chain. Close the bow anchor hatch (10).

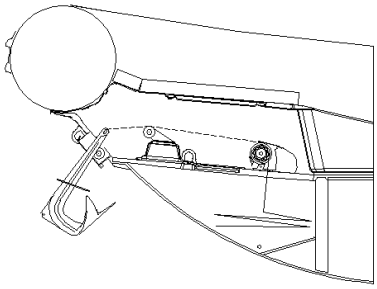
**⚠ WARNING**

***In the event of overloads in the anchor system, the circuit breaker (8) can set itself (automatically) to the OFF position. In this case, you can turn ON the circuit breaker only after eliminating the reason for turning it off.***

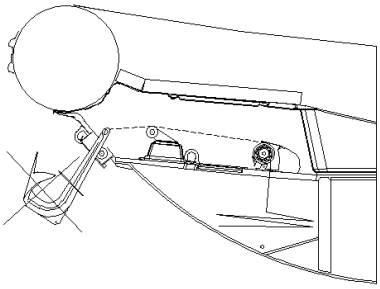
Anchoring is easier with another person on board. First be certain that the line for the anchor is properly attached, to avoid losing the anchor and anchor line overboard. The end of the anchor line opposite to the anchor is fixed to the boat hull. The anchor line consists of a stainless steel chain and nylon rope. Chain will stand up to the abrasion of sand, rock, or mud on the bottom. Nylon rope will stretch under a heavy strain cushioning the impact of waves or wind on both the boat and the anchor.

To drop the anchor, select a well protected area, preferably with a flat bottom.

Do not throw the anchor over while the boat is making headway, or moving forward. Slowly drop the anchor over the side of the boat until it touches the bottom as the boat slowly moves back. Usually the length of anchor line used should be 5 to 10 times the depth of the water.
After you have anchored, check your position with landmarks if possible. You need to continue to monitor these landmarks to make sure you are not drifting.
Strong point of anchor system is designed for a maximum horizontal load of 19.1kN.
The breaking strength of anchor line shall in general not exceed 80 % of the breaking strength of the respective strong point.
"Trefoil" anchor is made from stainless steel and have the reputation of not breaking out with tide or wind changes, instead slowly turning in the bottom to align with the force. The benefits of that anchor are that it are very effective in boulder bottoms, perform relatively well with low rode scopes and set fairly reliably.



*ANCHOR CORRECT POSITION.*
*CONTINUE TO STOW THE ANCHOR.*



*ANCHOR NOT CORRECT POSITION.*
*RESTART TO STOW THE ANCHOR.*

Fig.14

**⚠ CAUTION**

***Anchoring can be an emergency procedure. Learn to use your anchor system in calm waters in calm weather.***

**⚠ CAUTION**

***Rollers are made of nylon and have a limited lifespan.***
***Check them periodically for damage. Replace them if necessary.***

**⚠ CAUTION**

***In order not to lose the anchor, periodically check the correct tightening of the anchor shackle (4a).***

**⚠ WARNING**

***Safety pin must always been hooked to the chain when the anchor system is not in use.***
***This will prevent accidental dropping of the anchor.***

**⚠ WARNING**

***Do not use the anchor system for any other purpose for which it was not designed.***

**⚠ WARNING**

***Always turn off the windlass circuit breaker when the windlass is not in use***
***to prevent any accidental engagement.***

**⚠ WARNING**

***Always keep hands and feet off an operating windlass.***
***If the chain gets blocked, turn the windlass off and try to free the chain extremely carefully.***

**⚠ CAUTION**

***Check that the chain was not twisted in the area between the anchor and the windlass. Untwist it, if necessary.***

**⚠ CAUTION**

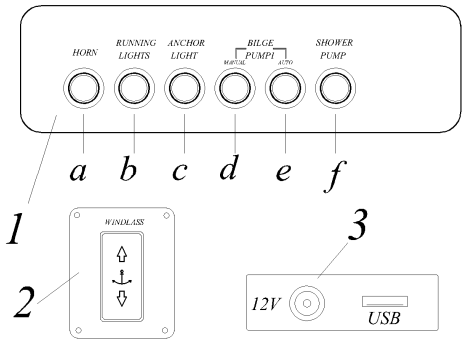
***Periodically clean out the drain opening (7) from dirt.***

## ELECTRICAL SYSTEM.

This section reviewed the individual electrical components and their locations and functions in the electrical system. For more complex questions beyond the scope of this manual, please contact your nearest BRIG dealer.
**Do not modify the electrical system yourself. Any modifications, repairs and routine maintenance of the electrical system and all of its components may only be performed by authorized representatives.**

### SWITCH PANEL.

The switch panel (1) Fig.15 and windlass control switch (2) are located on the dashboard of the steering console. The USB and 12V sockets (3) are located inside the glove box on the steering console.




1 - panel with switches:
- ***a***- horn
- ***b***- navigation lights (red and green)
- ***c***- anchor light (white all-round)
- ***d- e-*** bilge pump (auto and manual mode)
- ***f***- shower pump (fresh water)

2 - switch for control of anchor windlass
3 - USB and 12V sockets

Fig.15

*The switch panel:*

***a***- horn. Press the switch to beep. Make sure the horn is tested before each outing as it can be valuable in navigation situations and can be used for bridge communications.

***b***- navigation lights (red and green). Press the switch to turn on/off the navigation lights (red and green). Navigation lights are mounted on the steering console or on T-Top depending on your boat's equipment.

***c***- anchor light (white all-round). Press the switch to turn on/off the white all-round light. The white all-round light is mounted on T-Top, or on the arch, or on the steering console depending on your boat's equipment.

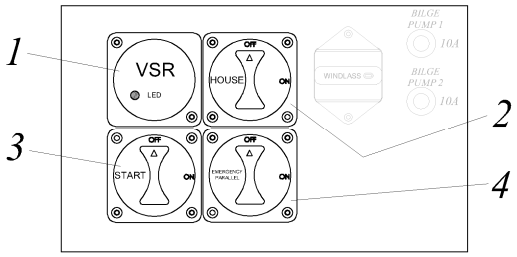
Use navigation lights according to Navigation Light Rules.

***d- e-*** bilge pump. Press to control bilge pump (see details in the DRAIN SYSTEM section of this manual).
***f-*** shower pump. Press to control shower pump (see details in the FRESH WATER SYSTEM section of this manual).

*Switch for control of anchor windlass (2).* How to use this switch is described in section ANCHORING of this manual.
*USB and 12V sockets*. These can be used to power accessories with the correct adapters to charge phones and tablets.

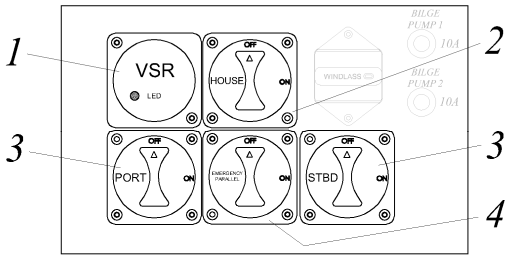
**MAIN SWITCHES.**
In the Fig.16 you see main switches panels for two or for three batteries, depending on the configuration of your boat. Usually three batteries are installed if your boat is equipped with twin engine. One start battery for each engine (switches marked as “PORT” for the engine on the port side and “STBD” for the engine on the starboard side), one as a house accessory battery (switch marked as “HOUSE”) for higher amperage drawing components.

*Two batteries*




*NICHE WITH MAIN SWITCHES*

*Three batteries*




*NICHE WITH MAIN SWITCHES*

Fig.16

1 - Voltage Sensitive Relay (VSR)
2 - House Battery Main Switch (On-Off)
3 - Start Battery Main Switch (On-Off)
4 - Emergency parallel (On-Off)

The panel with the main switches is located in the niche (starboard side, steering console). You can control your batteries with the main switches. Set the main switch knob (2) or (3) Fig.16 to the ON position. This will turn on the selected battery. Set the main switch (2) or (3) to the OFF position. This will turn off the selected battery.
To start the engine(s) the battery main switches (2), (3) set at the ON position.

Main switches are type BF441 and have removable knob for safety. Turn the knob to the «Remove» position and pull it towards you to remove.

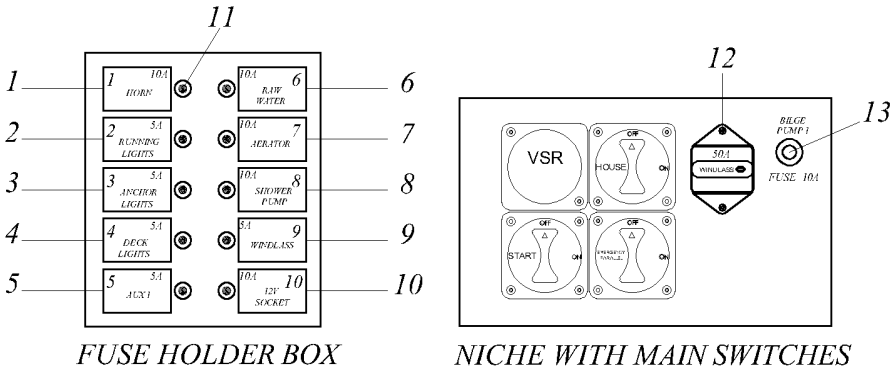
**⚠ WARNING**

NEVER DISCONNECT BATTERIES WHILE THE ENGINE(S) IS RUNNING.
STOP THE ENGINE(S) BEFORE DISCONNECTING THE BATTERIES.

Voltage Sensitive Relay (VSR) (type BF451) automatically combines two batteries when charging and isolates two batteries when not charging. VSR has built-in LED indication. The LED indication is ON when VSR engages combining batteries.
In case of a significant discharge of your batteries or breakdown of VSR, you can use switch (4) “Emergency parallel”. Set the knob of switch “Emergency parallel” (usually yellow) to the ON position and you force both batteries to be used together. The usual position of the knob of switch “Emergency parallel” is OFF.
As this particular battery switch “Emergency parallel” features a “Stop engine before switching” footprint once the engine starts you can reposition the battery switch to the OFF detent to revert back to one battery for engine starting.
It is recommended not to leave the switch “Emergency parallel” in the ON position as under the right conditions a severe discharge could result in both batteries becoming “dead”.

**FUSE.**
The fuse holder box (Fig.17) is located inside the steering console. All fuses in this box are standardized blade fuses. To replace a blown fuse, you need to open the cover of fuse holder box, pull out the blown fuse and install a new one of the same rating. **Always install fuses of the correct rating**.

The fuses in the niche with main switches are resettable. They can be restarted after being triggered. For more information about the windlass circuit breaker (12), see the “ANCHORING” section of this manual. To restart the fuse for bilge pump (13), just press the button on it.




*FUSE HOLDER BOX* *NICHE WITH MAIN SWITCHES*

Fig.17

1 - blade fuse (10A) for horn
2 - blade fuse (5A) for navigation lights
3 - blade fuse (5A) for white all-round light
4 - blade fuse (5A) for additional equipment
5 - blade fuse (5A) for additional equipment
6 - blade fuse (10A) for additional equipment
7 - blade fuse (10A) for additional equipment
8 - blade fuse (10A) for fresh water (shower) pump
9 - blade fuse (5A) for windlass
10 - blade fuse (10A) for USB and 12V sockets
11 - LED indication of blown fuse
12 - windlass circuit breaker (50A)
13 - resettable fuse (10A) for bilge pump

**⚠ CAUTION**

***Always have spare blade fuses on board in an easily accessible place.***

**⚠ WARNING**

***Before replacing or restarting a blown fuse, make sure that the cause of the blown has been eliminated.***
***Turn OFF main switches before replacing or restarting fuses.***
***Don't consider yourself an expert, turn to professionals.***
***Faults in electrical systems can cause a fire.***

**BATTERIES.**

Batteries are not provided from the manufacturer. Normally the dealer will add the proper batteries on the boat delivery. The boat requires two batteries: one for engine starting, one as a house accessory battery for higher amperage drawing components. If your boat has twin engine, a third battery will be installed for the starting second engine.

Flooded lead, AGM, gel-cell, and maintenance free battery types are all approved for your boat.

However, all batteries installed on your boat must be of the same type.

**Note that when replacing batteries never mix types such as an AGM with flooded lead.**

For more battery information refer to your outboard owner's manual or BRIG dealer.

Usually all batteries are located inside the steering console. All batteries must be securely fixed with special fasteners. Battery boxes or other types of enclosures may cover batteries. Battery boxes are vented for hydrogen gas release.

**⚠ WARNING**

***1. Do not use any battery that does not meet the minimum specifications as the electrical system may be overloaded and cause electric system damage. Never use a battery that exceeds the CCA specs.***

***2. Ensure that the charging system is operating properly as the engine will not start with low battery voltage.***

***3. Do not store flammable liquids on board the vessel. See warning label on the battery.***

***4. Do not store items on top or near the battery box as it may keep battery vapors from venting through the cover top.***

***5. Never turn the battery switch off with the engine running as charging system damage will result.***

***6. When installing battery cables red goes to positive (+) post & black goes to negative (-) post.***

***7. Periodically check battery positive and negative leads and hardware for tightness/corrosion at terminals.***

***8. If flooded lead cell batteries are used periodically check the cell electrolyte level.***

***9. Wear protective eye gear and rubber gloves when servicing batteries.***

***10. Never smoke around batteries or bring any source of ignition near them.***

**⚠ DANGER**

***PREVENT SEVERE INJURY OR DEATH! DISCONNECT ALL ELECTRICAL POWER SOURCES BEFORE ATTEMPTING TO REPAIR OR REPLACE ANY ELECTRICAL COMPONENT.***

## FIRE EXTINGUISHERS

The fire extinguisher is not supplied by the manufacturer. Your boat must be equipped with a fire extinguisher by a BRIG dealer when the boat is delivered.
Approved fire extinguishers are required on all BRIG boats. Besides the minimum requirements always check local rules for additional requirements and equipment. Consult a professional when choosing the type of fire extinguishers. Your fire extinguishers must be approved for extinguishing fires with flammable liquids (gasoline, oil, etc.) and for extinguishing fires caused by electrical problems. We recommend carrying at least two fire extinguishers on board.

Approved extinguishers are hand-portable. The extinguishers contain a plate that shows the manufacturers name and extinguisher type, capacity and operating instructions.
They have a special marine type mounting bracket which keeps the extinguisher solidly mounted until needed. The extinguisher needs to be mounted in a readily accessible location but one out of being bumped by people while underway. All approved extinguishers need to have an indication gauge.

**⚠ WARNING**

***Fire extinguishers have a limited shelf life.***
***Always check the suitability of the fire extinguisher and it is ready for use.***

**⚠ DANGER**

***Read the instructions for use of the fire extinguisher carefully. Be sure you understand correctly how to use a fire extinguisher in an emergency.***
***Train your boat crew to use a fire extinguisher correctly. In an emergency, you will have little time.***

**REBOARDING MEANS.**

Reboarding ladder is mounted on the left stern platform of the boat (Fig.18).
If you are in the water and the ladder is folded, you can lay out it and return onboard.
The ladder is fixed with Velcro. Just unclip it.

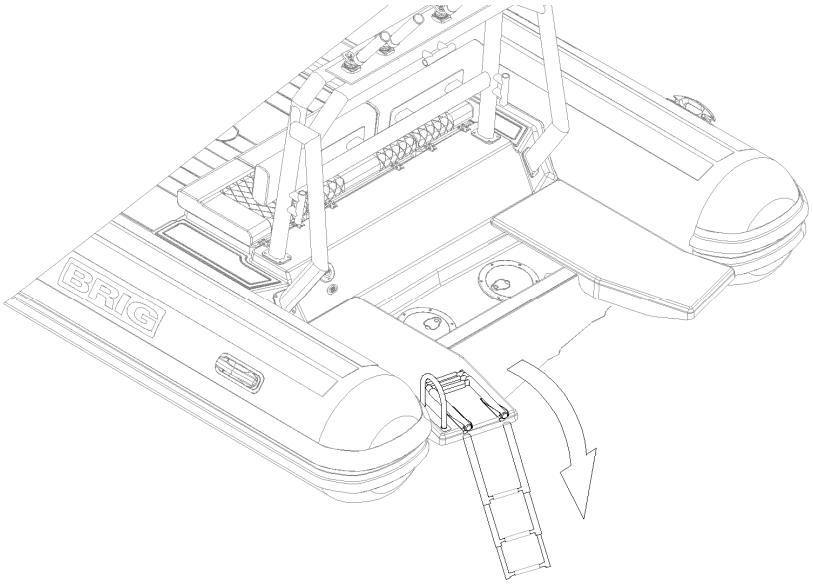



Fig.18

**⚠ WARNING**

***Be careful: rotating propeller on the motor can cause injury.***
***Never try to board using any part of the outboard motor as serious injury may occur***

**⚠ WARNING**

***Be careful while on the left platform. The ladder on the platform or its parts may be the cause of injuries.***

**⚠ CAUTION**

***The load on the ladder is limited to 150kg (330lb).***

**⚠ CAUTION**

***DO NOT forget to fold and fix the ladder after use.***

Be sure to use a hand hold for support as needed when on the ladder. Never try to board using any part of the outboard motor as serious injury may occur.

Be careful while on the left platform. The ladder on the platform or its parts may be the cause of injuries.
The load on the ladder is limited to **150kg (330lb).** Make sure that only one person is using the ladder at a time.
The load on the each stern platform is limited to **150kg (330lb).** Make sure there is only one person on each platform at a time.
Check the ladder hardware periodically. There should be no damage or corrosion. Replace hardware and lubricate hinges as needed.

## BOAT LIFTING.

You can see the diagram of hanging your boat for lifting in Fig.19.

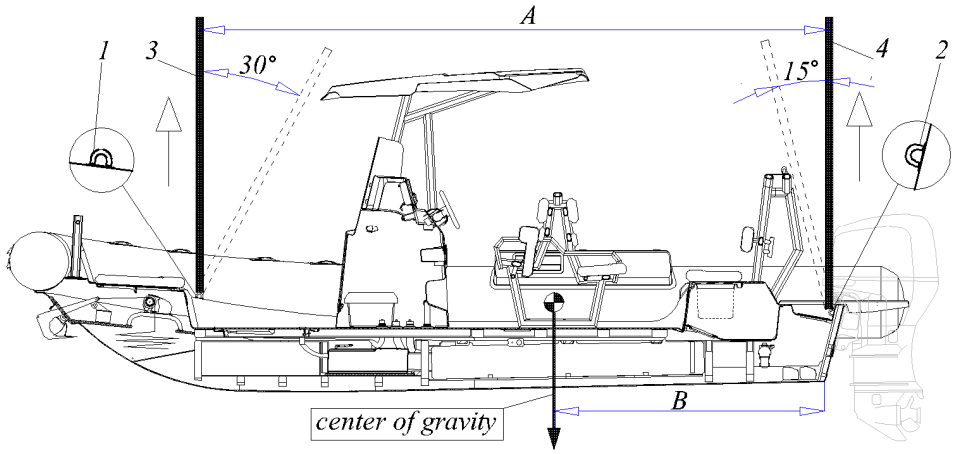



Fig.19

A= 4.7m (15ft 5in)

B= 1.9m (6ft 3in)

1 – two bow lifting eyes
2 – two aft lifting eyes
3 – front lifting slings
4 – stern lifting slings

There are two bow eyes (1) and two aft eyes (2) installed to lift your boat. Always use all four eyes to lift the boat.
You should always use only certified, verified and suitable lifting slings for lift of your boat.
Inspect lifting slings before use. There should be no damage, tears, abrasion. Hooks of all lifting slings must have locks to prevent spontaneous or accidental disconnection from the lifting eyes of the boat. The hooks of all lifting slings should be the right size for your boat's lifting eyes.
Inspect boat's lifting eyes and adjacent fiberglass before lifting of your boat. There should be no damage, cracks, bends.
Make sure that the front slings deflect no more than approximately 30º and the stern slings deflect no more than approximately 15º (see Fig.19) to avoid damaging the boat superstructure.
**Fig.19 shows the center of gravity of a boat with a motor, fuel and equipment from the manufacturer. Boat's center of gravity of your boat may differ from showing. It depends on the equipment, the boat load and the weight of the installed motor**.
Before lifting the boat all equipment must be securely fixed. If this is not possible, all non-fixed equipment should be removed from the boat or stored in lockers.
All boat hatches must be locked before the boat is lifted.

**⚠ WARNING**

***People cannot be onboard during the lifting.***

**⚠ WARNING**

***Never stand under or near the boat suspended.***

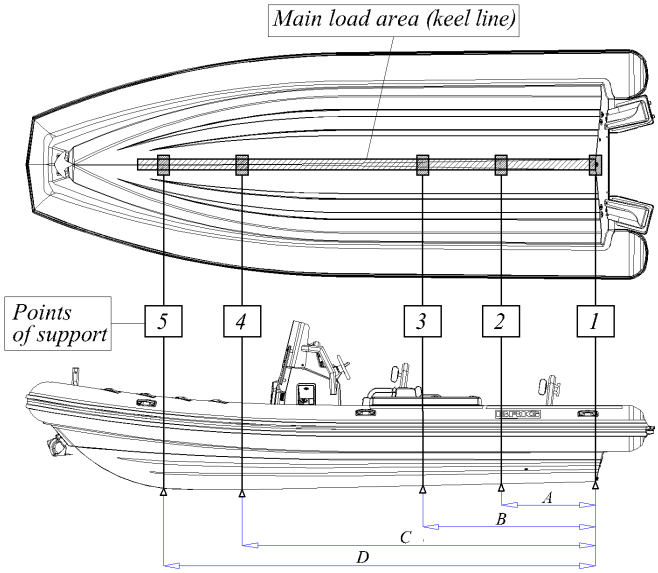
**⚠ WARNING**

***Never use to lift the other elements of the design of the boat, except for the lifting eyes.***
***Do not use other slinging methods than those specified.***

**⚠ WARNING**

***Always check the lifting eyes, the boat hull around them, and the boat lifting straps before use.***

**BOAT INSTALLATION ON TRAILER.**




A= 420mm (1ft 4in)
B= 1500mm (5ft)
C= 3100mm (10ft 2in)
D= 4400mm (14ft 5in)

Permissible deviations: +/- 50mm (+/- 2in)
Maximum transportable mass: 1860kg (4100lb)

Fig.20

Installed on a trailer (or on kell-blocks for storage) the boat should been laying on all surface of the **Main loading area (keel line)** (Fig.20).
It is possible to install the boat on the **Points of support** (at least three points). **Point of support (1)** must be use always and any other recommended points may be chosen by you depending on the trailer design.
We do not recommend using other surfaces of the boat hull as support for transport on a trailer. Other surfaces of the boat's hull (not the keel line) cannot be used as primary reference surfaces. Use them as support against rollover.
**Never use a buoyancy tube to support a boat on a trailer or keel-blocks.**
Use the front towing U-bolts and rear lifting U-bolts to fix the boat with straps to the trailer.

After storing the boat on keel blocks or after transporting it on a trailer, carefully inspect the boat's hull. There should be no damage to the boat's hull.
Permissible deviations +/- 50mm. Maximum transportable mass: 1860 kg

**⚠ WARNING**

***Incorrect installation of the boat on a trailer or keel-blocks can damage the boat's hull.***
***You can always get more information from the BRIG dealer regarding the installation of the boat on a trailer or keel-blocks for storage.***

**⚠ CAUTION**

***To mount the boat on a trailer, always use the entire surface* "Main loading area (keel line)"**
***or the recommended* "Point of supports" on it.**

**⚠ CAUTION**

***Securely fix the boat with straps to the trailer using the front and rear U-bolts.***

**⚠ CAUTION**

***When towing a boat on a trailer, periodically check that it is securely attached to the trailer.***

## COVERING THE BOAT WITH A COVER.

To protect your boat from ultraviolet radiation, bad weather, dust, we recommend using a cover kit. The cover kit consists of a console cover, helm seat cover and a stern seat cover (Fig.21, Fig.22). Console cover can be of two versions: for a boat without a T-Top (Fig.21) and for a boat with a T-Top (Fig.22). Helm seat cover and stern seat cover is the same for both versions.
Just cover the steering console, helm seat and stern seat with the covers. Fix the each cover with snap fasteners to the boat hull. Fix helm seat cover with belts and buckles. Make sure that all the snap fasteners are locked.
Before the cover set is folded for storage, dry it from moisture. This will help prevent the formation of mold and extend the life of the cover set.

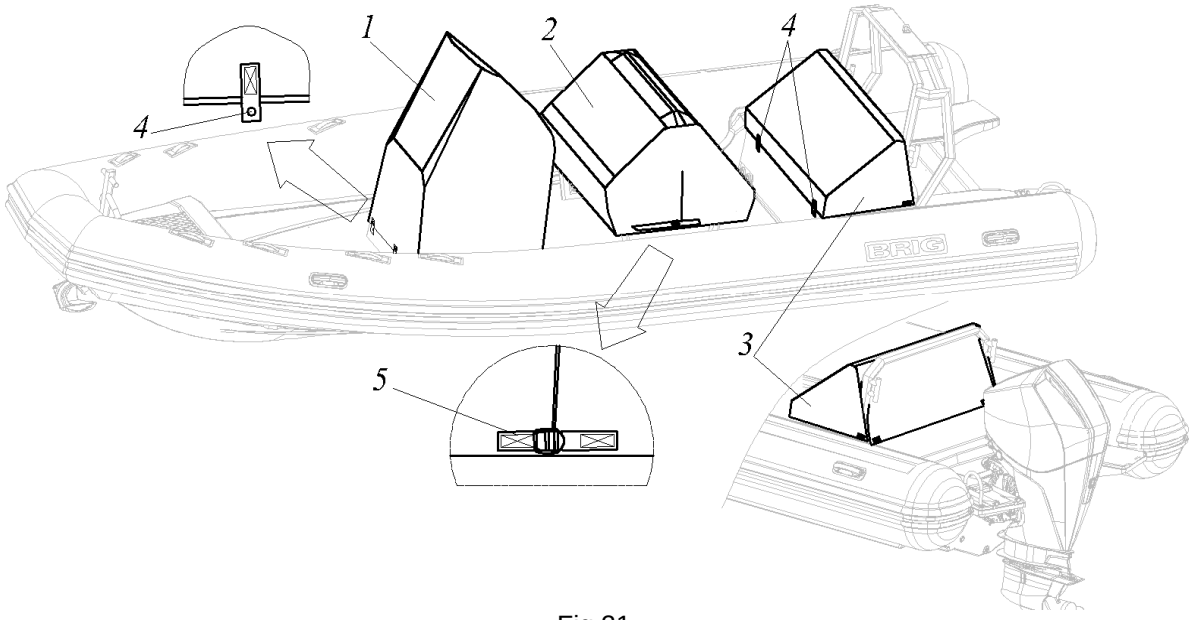



Fig.21

1 – console cover
2 – helm seat cover
3 – stern seat cover
4 – snap fastener
5 – belt and buckle

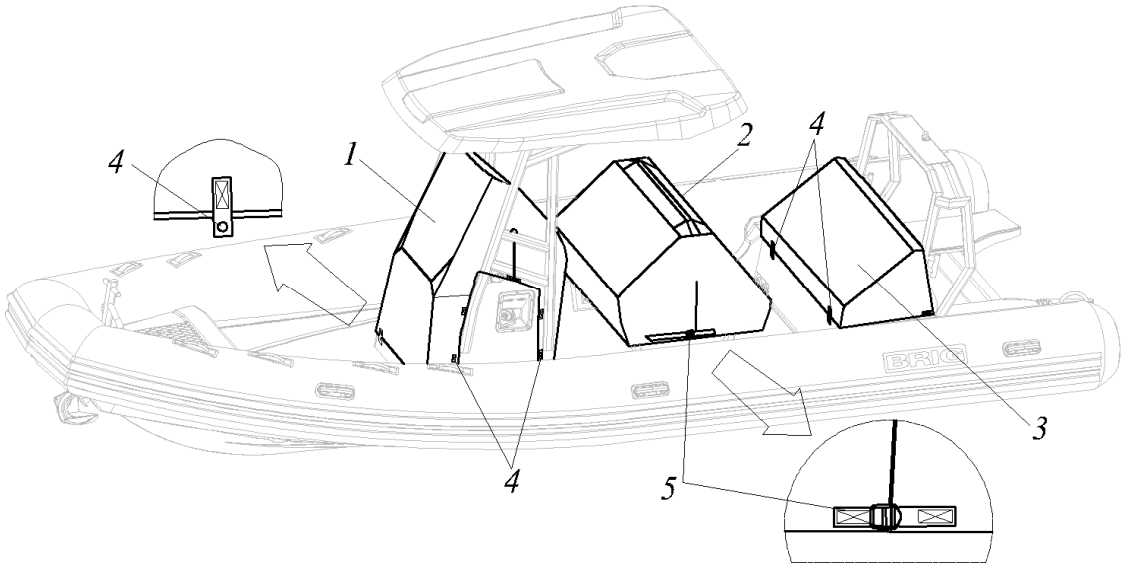



Fig.22

1 – console cover
2 – helm seat cover
3 – stern seat cover
4 – snap fastener
5 – belt and buckle

Avoid spilling gasoline, oil, chlorine-based detergents, solvent cleaners and other aggressive fluids on the cover set.
To avoid premature aging use only a cleaner that is water based. Do not use chlorine cleaners. Their negative effects can develop over time. ALWAYS CHECK ANY CLEANER BEFORE USING.
Most stains can be removed if caught early, and cleaned with a soft bristle brush and a cleaner like Dawn dish soap. Create lather and lightly scrub with the brush.

**WARNING SIGNS and LABELS.**

Warning signs and labels are installed on your boat (if applicable) Fig.23.
Do not remove warning signs and labels. Always check their suitability.
If the warning signs are damaged and you cannot read the text or symbols, you must order new ones from your dealer.
Check with your dealer for the correct warning signs and labels mounting location.

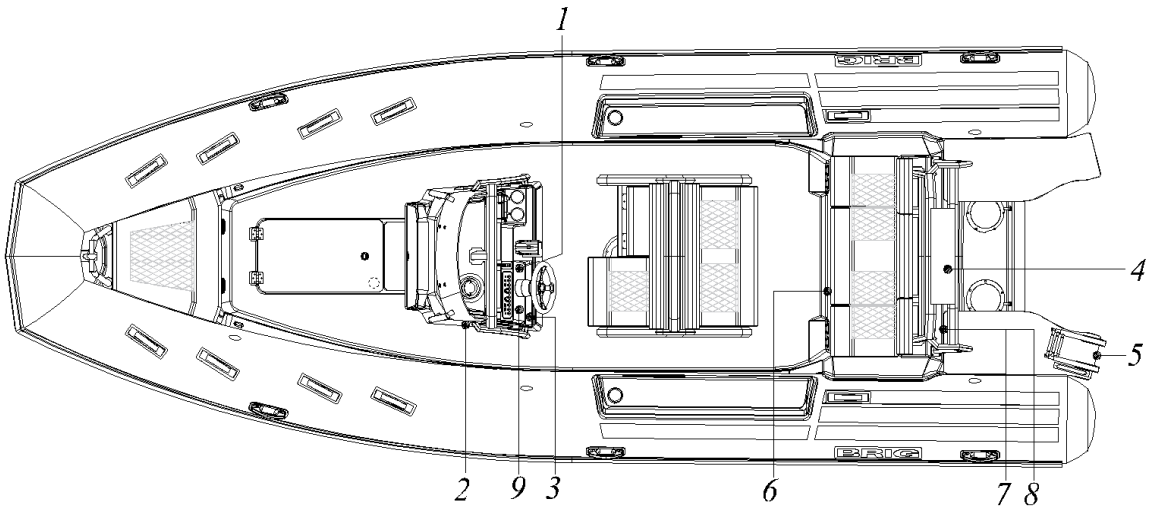



Fig.23

1 - WARNING. Failure to follow these warnings could severe injury or death

**⚠ WARNING**

**Failure to follow these warnings could cause SEVERE INJURY or DEATH**

- CARBON MONOXIDE (CO) CAN CAUSE BRAIN DAMAGE OR DEARTH.
  - Engine and generator exhaust odorless and colorless carbon monoxide gas.
  - Signs of carbon monoxide poisoning include nausea, headache, dizziness, drowsiness, and lack of consciousness
  - MOVE TO FRESH AIR if anyone shows signs of carbon monoxide poisoning.

- CHECK WEATHER FORECAST BEFORE DEPARTING DOCK and heed all weather advisories
- WEAR SAFETY LANYARD at all time while operating boat to prevent unmanned operation.

- NEVER OPERATE WHILE UNDER THE INFLUENCE or drugs or alcohol.
- DO NOT OVERLOAD THE BOAT. ENSURE THAT WEIGHT IS PROPERLY AND EVENLY DISTRIBUTED fore and aft and on both side of the boat to avoid poor handling, sudden loss of control, swamping and/or capsizing.
- PASSENGERS SHOULD WEAR U.S. COAST GUARD APPROVED LIFE JACKETS.
- MAKE SURE THAT ALL PASSENGERS ARE PROPERLY SEATED WHILE UNDERWAY. To avoid passengers falling overboard or being ejected from the boat, do not allow passengers to sit on seat backs, gunwales or outermost deck edges while boat is moving.

- REDUCE SPEED BEFORE ATTEMPTING SUDDEN OR SHARP TURNS, AND MAINTAIN SAFE SPEEDS for water conditions and environment at all times. Maneuverability at high speeds is limited, and sudden turns may cause loss of boat control.
- KEEP PROPER LOOKOUT AND SAFE DISTANCE for the conditions at all time to avoid collisions.

- OBEY APPLICABLE NAVIGATION RULES AND BOATING LAWS.
- USE CAUTION AND PROPER LIGHTING during night time and boating in adverse weather.
- READ THE OWNER'S MANUAL AND COMPLETE THE BOAT'S PRE-OPERATION CHECKLIST prior to boat operation.

2 - WARNING. LEAKING FUEL

**⚠ WARNING**

AVOID SERIOUS INJURY OR DEATH FROM FIRE OR EXPLOSION RESULTING FROM LEAKING FUEL.

INSPECT SYSTEM FOR LEAKS AT LEAST ONCE A YEAR.

3 - WARNING.MAXIMUM ENGINE WEIGHT

**⚠ WARNING**

THIS BOAT HAS BEEN DESIGNED FOR A MAXIMUM OUTBOARD ENGINE WEIGHT OF

**1235** LBS.

READ THE OWNER'S MANUAL

2077.1235

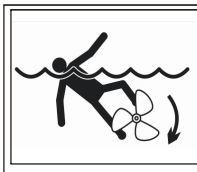
4 - WARNING Wakeboard

**⚠ WARNING**

THE LOAD SHOULD NOT EXCEED 400 POUNDS ( 180 KG ).
OVERLOADING THE BOAT TOWER MAY CAUSE INJURY AND/OR EQUIPMENT DAMAGE.
DO NOT TOW HEAVY LOADS SUCH AS KITES OR BOATS.

2077.04

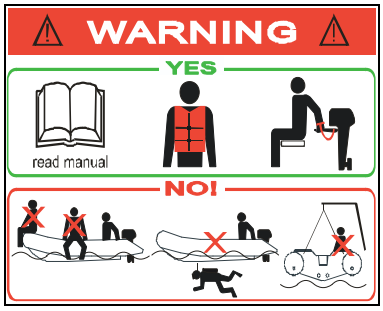
5 - WARNING. ROTATING PROPELLER



**⚠ WARNING**

ROTATING PROPELLER OF THE ENGINE

6 - WARNING.



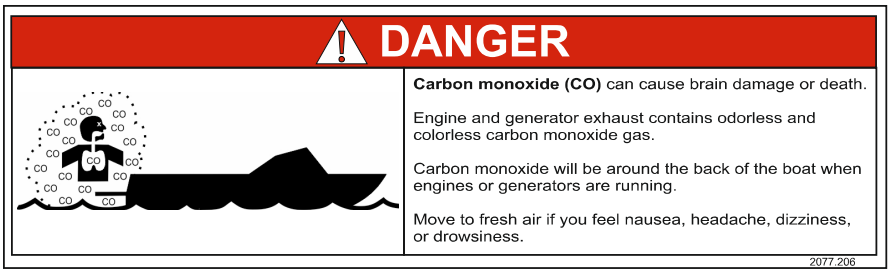

7 – Fresh water

**⚠ CAUTION**

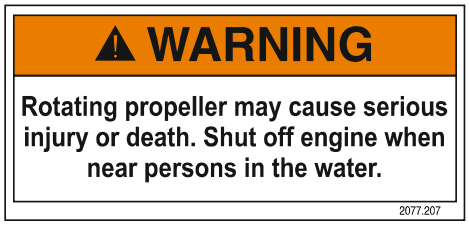
FRESH WATER.
NON-POTABLE WATER.
DO NOT DRINK.

2077.23

8 - DANGER
Carbon monoxide (CO) can cause brain damage or death




9 - WARNING.
Rotating propeller may cause serious injury or death




**GENERAL BOATING SAFETY.**

We strongly suggest that you thoroughly familiarize yourself and friends or members of your family with safe boating practices before setting out. Remember, that along with the freedom and exhilaration of boating comes the responsibility that you have for the safety of your passengers and other boaters who share the water with you. Boating regulations are vary. Check with your local authorities for the regulations pertaining to your area.

Check with local FM weather stations, Coast Guard, or on-line for the latest weather conditions. Remember getting caught in severe weather is hazardous. Check weather conditions periodically while you are boating. If you are forced to operate your boat in a storm condition, take common sense precautions; wear PFD's, store gear, reduce speed and if possible head for safe refuge.

Always check the weather before departure. Be particularly cautious of forecasted electrical storms and high winds. Always have up-to date charts aboard as a backup to your plotter and auto pilot option. Charts can be obtained at a marina, on-line store or by contacting with federal government agencies. Always file a float plan. Leave details of your

trip with someone responsible who will be remaining on shore. Include expected return, plus name and phone number of a contact person in case of emergency.

It is best to avoid operating your boat in foggy weather. When fog sets in, take bearings, log courses and speeds. You are required to emit a five second blast from your horn or whistle once every minute. Also, have your passengers wear PFD's and observe for oncoming vessels.

If foul weather catches you at sea do the following:

1. Slow down. Proceed with caution and put on your life vests.
2. Try to reach the nearest safe shoreline.
3. Navigate your vessel slowly into the waves at a 45 degree angle.
4. Passengers should sit low in the center of the vessel.
5. Monitor your bilge pump. Make sure sump stays free of water.
6. Secure loose gear. Make ready emergency equipment.
7. Anchor over the bow but never over the stern.

Operation in shallow water presents a number of hazards including sand bars and water levels influenced by tides. If the vessel strikes an underwater hazard, check for boat and engine damage.
If the engine vibrates excessively after striking an underwater obstruction, it may indicate a damaged propeller. If you run aground, seek help by radio or flares. Make sure your boat and equipment are in top condition. Do this by frequently inspecting the hull, engine and propulsion components.

You must provide a Coast Guard approved personal flotation device (PFD) for every person on board. These PFD's should be in good condition and easily accessible. Insist that non-swimmers and children on board wear a PFD at all times. If you encounter rough weather conditions, make sure everyone on board is wearing a PFD, including yourself. Instruct your passengers in how to put on their PFDs and be sure they know their storage location on the boat.

**Remember, in an emergency, a PFD that cannot be quickly located and worn is useless.**

Never allow anyone to sit anywhere on the boat not specifically designed as seating. While underway, ALWAYS insist passengers occupy a recognized seat position.

**Never drink and drive!** As captain, you are responsible for the safety of your passengers. Alcohol and boating can be a dangerous combination. DO NOT mix them. Alcohol impairs the boat operators ability to make conscious decisions and react to emergency situations quickly.

**Never overload your boat! An overloaded boat, or one with uneven weight distribution can be difficult to steer. Never let people stand in bow area while underway as vision will be obstructed!!!**

**⚠ WARNING**

READ AND UNDERSTAND THE SEATING ARRANGEMENT DRAWING IN THE “CREW LIMIT” CHAPTER.
THIS DRAWING DISPLAYS THE DESIGNATED SEATING ARRANGEMENT FOR A BALANCED LOAD AND BOAT MAXIMUM PERSONS SEATING CAPACITY.

Use maximum caution when fueling. Never allow any smoke or flame nearby while you are fueling. ALWAYS check for fuel leaks and fumes when fueling is completed. Be certain there is enough fuel aboard for your cruising needs. Include any reserve that might be needed should you change your plans due to weather or an emergency. Practice the “one-third rule: Use one-third of your fuel going out, one-third to return and retain one-third as a reserve.

Carbon monoxide (CO) in exhaust can be hazardous, especially from gasoline engines. Familiarize your crew, passengers and yourself with the sources, symptoms and possible effects of carbon monoxide poisoning. Remember that boats in the same general vicinity can cause your vessel to accumulate dangerous CO levels in the cockpit or near the engine(s).

**⚠ WARNING**

AVOID SERIOUS INJURY OR DEATH FROM CO POISONING!
DO NOT OPERATE THE BOAT WITH PEOPLE HOLDING ON TO THE SWIM PLATFORM OR WITH PEOPLE IN THE WATER.

For safety avoid the following:

1. Do not park by other boats with their engine idling or generator cycling for an extended period of time.
2. Do not operate an engine for extended periods of time while in a confined area or where exhaust outlets face a sea wall or bulkhead.

3. Do not operate the engine for an extended period of time with the suntop in the upright and installed position. The “station wagon effect” or back drafting can cause CO gas to accumulate inside the cabin, cockpit/hardtop or bridge areas when the boat is under way, using protective weather coverings (canvas), high bow angle, improper or heavy loading, slow speeds, or at rest. This can occur when traveling behind another boat.

4. Do have the engine exhaust system inspected when the boat is in for service.

5. Persons sleeping can easily be overcome by carbon monoxide without realizing it. Do not sleep on board while an engine or generator is running close-by.

6. Do not operate your vessel for extended periods with the bow up in slow cruise conditions especially close behind a vessel being towed or one operating at slow speeds.

**⚠ DANGER**

CARBON MONOXIDE (CO) IS A TASTELESS, ODORLESS AND INVISIBLE GAS THAT CAN CAUSE DISCOMFORT, SEVERE ILLNESS, AND EVEN DEATH. EXERCISE CAUTION WHILE OPERATING ENGINE(S) IN CONFINED SPACES OR AT DOCK SIDE. DO NOT ALLOW HULL EXHAUST OUTLETS TO BECOME BLOCKED OR EXHAUST FUMES CAN BECOME TRAPPED IN AND AROUND THE CONFINES OF YOUR BOAT.

When cruising, stay clear of fisherman. They may have lines or nets out which might be cut or get caught in your propeller if you come too close. Slow down when approaching fishing boats. Do not return to cruising speed until the boats have been passed. If a fishing boat should be anchored, a large wake could flip or swamp the boat, upset fishing gear, pull the anchor loose from the bottom or worse yet cause someone to fall overboard.

When fishing from your boat, never anchor in a shipping channel or tie up to any navigational aid. These must be kept clear of at all times. Be sure to carry a local chart of the area to back up your plotter and be on the lookout for shallow water and hidden obstructions. Many times local conditions change and there is a time lag on the plotter chip until the next revision. Pick up a tidal chart if appropriate so you do not end up grounded.

The Navigation Rules set forth actions to be followed by boats to avoid collision. There are two main parts referred to as the inland and international rules. The inland rules apply to vessels operating inside the boundaries of your region. The international rules (referred to as 72 COLREGS) apply to vessels operating on the high seas and all connected waters outside the established demarcation boundaries. Most navigational charts show the demarcation lines by red dotted lines and are published in the navigation rules. Remember to consult with local agencies since areas such as “no wake zones,” swimming beaches, “diver down flag” and inland landlocked lakes fall under their responsibilities.

This section is only an introduction to the Navigation Rules. We strongly recommend additional training before getting behind the “wheel”.

Night Running.

Boats operating between sunset and sunrise (hours vary by region), or in conditions of reduced visibility, must use navigation lights. Night time operation, especially during bad weather and fog, can be dangerous. All Navigation Rules apply at night, but it is best to slow down and stay clear of all boats regardless of who has the right-of-way. To see more easily at night, avoid bright lights when possible. Also, it is helpful to have a passenger (appoint as lookout) keep watch for other boats, water hazards and navigational aids. To determine the size, speed and direction of other vessels at night, you should use the running lights. A green light indicates starboard side, and a red light indicates port side. Generally, if you see a green light, you have the right-of-way. If you see a red light, give way to the other vessel.

**⚠ WARNING**

TO AVOID INJURY AND DEATH! FOLLOW THE NAVIGATION RULES TO PREVENT COLLISIONS.

BRIG
RIGIDINTELLIGENTBOATS

| | |
|---|---|
| MODEL | ***Navigator 22*** |
| SERIAL No. | |
| Date of manufacture | |
| Quality inspection stamp | |