



OWNER'S MANUAL



Golden Line G650 OWNER'S MANUAL



TABLE OF CONTENTS

1. Safety information	10
Introduction	10
Precautionary symbols.....	11
General information.....	13
Maximum number of persons	14
Maximum loading capacity.....	14
Engine information	15
Risk of flooding and stability.....	16
Bilge pumps and bailing	16
Stability and buoyancy.....	16
Distribution of load	17
Risk of fire or explosion	19
Fire prevention	19
Fire-fighting equipment	25
Electrical systems - Safety rules	25
Engine starting	27



Man-overboard prevention and recovery	27
Means of reboarding	28
Danger from moving parts	29
Safety equipment.....	30
Safety driving rules.....	32
2. Boat identification	33
Boat's Identification number	33
Builder's plate	34
3. Before operating your craft.....	36
Weather	36
Checklist before departure	36
General.....	37
Checking the boat and equipment	38
Rules to observe when afloat	39
4. Operating the craft.....	42
Tube inflation	42



TABLE OF CONTENTS

Overpressure valve (if fitted).....	47
Motor installation	48
Fueling.....	50
Before fueling.....	50
While fueling.....	51
Engine start&stop	52
Anchoring and mooring.....	77
Anchoring.....	77
Mooring	79
Launching and recovering the boat from the water.....	82
Beaching	83
Towing.....	83
5. Technical information	85
Technical specification.....	85
Standard and optional equipment	87
Compartment chart	89



General arrangement of a boat.....	90
Steering console components	92
General view of a boat	94
Loading passengers.....	95
Electrical schematic diagram.....	96
6. Service and maintenance	97
Cleaning.....	97
Cleaning of tube	98
Airtightness of the inflatable tube	99
Maintenance of stainless steel.....	101
Winterizing and storage	101
Regular inspections	102
7. Trailering	103
Lifting the boat.....	103
Boat towing	104
8. Show respect for the environment.....	105



TABLE OF CONTENTS

9. Grand's warranty	106
General	106
Warranty period	106
Warranty coverage	107
Warranty exclusions	108
Warranty certificate	109
For your notes	110



1. SAFETY INFORMATION

INTRODUCTION

Thank you for choosing a Grand boat.

If you need assistance or advice please contact your Grand Dealer or Distributor who has qualified specialists, special tools, original spare parts and accessories and will be happy to assist.

This Manual provides an overview for the safe operation of your Grand boat. Please take time to read it carefully so as to become familiar with your new boat. Make sure that you fully understand the controls and instructions before operating the boat. Improper operation can be extremely dangerous!

Please, note that most boating-related accidents happen when safety instructions are ignored. We want you to enjoy your experience on your boat so please be sure to take our guidance seriously and comply with safety instructions at all times.

The basic safety rules are stated throughout the Manual, additional precautions are indicated by the special PRECAUTIONARY SYMBOLS:



SAFETY

PRECAUTIONARY SYMBOLS

The following precautionary symbols are used throughout this Manual:



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



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



Denotes a reminder of safety precautions or directs your attention to unsafe practices which could result in personal injury, damage to the craft or components or the environment.

PLEASE NOTE that in some countries a boat operating license or other form of authorization may be required.



Operators should be familiar with the use of all safety equipment and emergency procedures (e.g. man overboard recovery, towing etc.). We strongly recommend that appropriate training is undertaken from a recognized boating and/or safety organization prior using your boat.

Please note that in some countries it is a mandatory requirement to wear a buoyancy aid.

Some information may not apply to your boat since standard and optional equipment may vary from model to model.

Data sheets and specifications given in this manual relate to the boat's characteristics at the time of publishing. Grand reserve the right to introduce changes in specifications and equipment without notice and without obligation.

We continually work with our customers to improve quality and to ensure you will be completely satisfied with your Grand boat.

If you have any additional questions after reading this manual, please feel free to ask for your dealer.

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



GENERAL INFORMATION

Name of craft Manufacture: GRAND MARINE. Model: G650.

According to the Recreational Craft Directive 2013/53/EU of the European Parliament and of the Council of 20th November 2013, which is in force, your boat has design category: C, i.e., the craft is designed to operate in the following conditions:

Wind (Beaufort scale) up to and including Force 6.

Significant wave height ($H^{1/3}$, meters) up to and including 2 meters.

Explanatory note:

A watercraft given design category C is considered to be designed for a wind speed up to and including Force 6 and significant wave height up to and including 2 m.



WARNING

BE RESPONSIBLE, TAKE NOTICE OF THESE PARAMETERS WHEN YOU PLAN YOUR NAVIGATION PROGRAM AND DO NOT BOAT IF THE WIND/WAVE CONDITIONS ARE LIKELY TO EXCEED THESE PARAMETERS.



MAXIMUM NUMBER OF PERSONS

The Maximum number of people (adults + children) authorized to be on board according to design standards ISO 14946 and ISO 12217 is given in the technical data sheet in the “TECHNICAL INFORMATION” section.



DO NOT EXCEED THE MAXIMUM RECOMMENDED NUMBER OF PEOPLE. REGARDLESS OF THE NUMBER OF PEOPLE ON BOARD, THE TOTAL WEIGHT OF PEOPLE AND EQUIPMENT MUST NEVER EXCEED THE MAXIMUM RECOMMENDED LOAD. ALWAYS USE THE SEATS/SEATING SPACES PROVIDED.

MAXIMUM LOADING CAPACITY

You can find the maximum load capacity in the “TECHNICAL INFORMATION” section in this Manual. It is also shown on the builder’s plate affixed to the hull. Please note that the maximum load capacity includes the weight of all people onboard, outboard engine, provisions, personal effects, and additional equipment, excluding the weight of the contents of the fixed tanks when full. Note that excess and unevenly distributed load within the boat can create unstable steering conditions and even loss of control.



SAFETY



WARNING

WHEN LOADING THE CRAFT, NEVER EXCEED THE MAXIMUM RECOMMENDED LOAD. ALWAYS LOAD THE CRAFT CAREFULLY AND DISTRIBUTE LOADS APPROPRIATELY TO MAINTAIN DESIGN TRIM (APPROXIMATELY LEVEL). AVOID PLACING HEAVY WEIGHTS HIGH UP.

ENGINE INFORMATION

Information about recommended engine capacities, maximum engine capacities, maximum engine weights for each model are given in the technical data sheet of “TECHNICAL INFORMATION” section.



DANGER

NEVER USE A MOTOR WITH A POWER OUTPUT GREATER THAN THE MAXIMUM RECOMMENDED, OR HEAVIER THEN INDICATED ON THE BUILDER'S PLATE. THIS COULD RESULT IN LOSS OF CONTROL.



RISK OF FLOODING AND STABILITY

BILGE PUMPS AND BAILING

The craft is equipped with an automatic bilge pump and drain pipe. If needed you can turn on the bilge pump manually using a switch located on the steering console. If needed, you can turn on the bilge pump manually using a switch located on the steering console.



THE BILGE PUMP SYSTEM IS NOT DESIGNED FOR DAMAGE CONTROL.



CHECK BILGE PUMPS REGULARLY TO MAKE SURE THEY ARE WORKING. CLEAR DEBRIS FROM PUMP INLETS.

STABILITY AND BUOYANCY

The stability and buoyancy of the craft have been thoroughly assessed by the Manufacture in compliance with the requirements of the Recreational Craft Directive 2013/53/EU.



SAFETY

The craft builder guarantees that the boat meets all safety criteria during normal operating conditions.

However, the person responsible for operating the craft must always keep in mind that the safety of the craft and crew should be their priority at all times and that conditions on the water can change suddenly with little prior notice.

Before using your boat, it is strongly recommended that appropriate training is given to all crew members in the safe operation of the craft.

DISTRIBUTION OF LOAD

Evenly distribute the load within the boat.



CAUTION

1. POORLY DISTRIBUTED LOADS CAN DESTABILIZE THE BOAT AND MAY RESULT IN A LOSS OF CONTROL.
2. THE CRAFT'S HANDLING WILL CHANGE SIGNIFICANTLY DEPENDING ON THE LOAD CARRIED.
3. BE PARTICULARLY CAREFUL WHEN ACCELERATING OR CHANGING DIRECTION.
4. IT MAY BE NECESSARY TO ADJUST LOAD DISTRIBUTION AND TRIM WHEN NAVIGATION CONDITIONS OR THE CRAFT'S DIRECTION THROUGH WAVES CHANGE.



In case of an accident, do not panic and reassure passengers.

- Be aware that your boat, even if damaged, may provide the best shelter and facilitate your rescue. Never leave the boat whilst it remains afloat. Remember that an inflatable boat, even when full of water, is virtually unsinkable.
- If, after an accident, a tube compartment deflates, bring it inside the boat, restore the load balance to the opposite side of the deflated compartment and return to port at reduced speed.
- In case of a collision or an impact with a floating object, stop to examine the hull, the buoyancy tubes, the motor and its attachments and return to shore at a low speed.
- Signal for help.

Following an accident and before using the craft again, make sure that it is examined by your dealer or a qualified technician and any defects are repaired.



NEGLECTING REGULAR INSPECTIONS AND REPAIRS MAY LEAD TO A SERIOUS INJURY OR DAMAGE AND WILL REDUCE THE LIFE OF YOUR BOAT.



SAFETY

RISK OF FIRE OR EXPLOSION

Pay particular attention to the fact that a fuel tank and electrical devices are installed on your boat. This means that there is a risk of explosion or fire caused, for example, by a spark. Be careful and check systems regularly with a view to identifying leaks or corrosion in the fuel tank and possible damage to the electrical wiring.

For information concerning safe operation of the engine consult the manufacturers instruction manual.

FIRE PREVENTION

Consult your Dealer for more detailed information on this subject before operating your boat.

The owner/operator of the craft should:

- Inform all crew members about the location and operation of all firefighting equipment.
- Check firefighting equipment at the intervals indicated on each item.
- Replace any used extinguisher with one of same type and rating.



 **WARNING**

NEVER OBSTRUCT ACCESS TO PORTABLE EXTINGUISHER.

 **WARNING**

NEVER MODIFY ANY OF THE CRAFT'S SYSTEM UNLESS COMPETENT TO DO SO.

 **WARNING**

NEVER FILL ANY FUEL TANK WHEN ENGINE IS RUNNING.

 **DANGER**

NEVER SMOKE WHILE HANDLING FUEL.

 **DANGER**

AVOID CONTACT OF FLAMMABLE MATERIALS WITH HOT ENGINE PARTS.



SAFETY



DANGER

NEVER DELIBERATELY OR INADVERTENTLY BLOCK VENTILATION OF FIXED PETROL TANK AND BATTERY COMPARTMENTS.



DANGER

NEVER STORE PETROL CONTAINERS OR EQUIPMENT CONTAINING PETROL IN ANY AREA NOT DESIGNATED FOR THE SPECIFIC STORAGE OF PETROL.



WARNING

CHECK FOR FUEL AND GAS VAPOURS OR FUEL LEAKS AT REGULAR INTERVALS AND BEFORE STARTING THE ENGINE.



VENTILATION OF PETROL TANK COMPARTMENT

Petrol tank compartment has a natural ventilation system. The fuel tank compartment is ventilated by the natural flow of air through ventilation openings (figs. 1, 2 and 3) to and from the atmosphere. These openings are located at the bow locker and rear storage compartments.

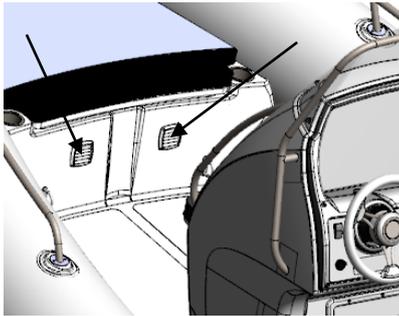


Fig.1. Ventilations opening on the bow locker.

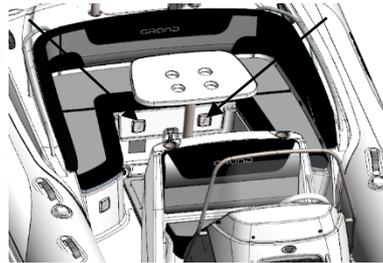


Fig. 2. Ventilation openings on the rear dry storage compartment.

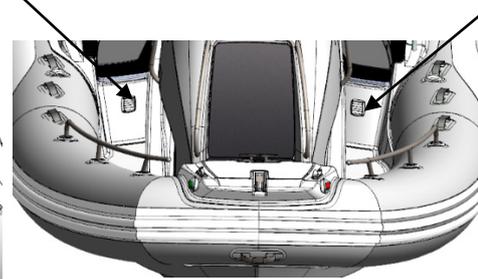


Fig. 3. Ventilation openings on the rear side compartment.



WARNING

DO NOT OBSTRUCT OR MODIFY THE VENTILATION SYSTEM AND VENTILATION OPENINGS.



SAFETY

CAUTION

ALL EQUIPMENT THAT BURNS FUEL WILL REQUIRE AN AIR SUPPLY. ENSURE ALL AIR INTAKES ARE CLEAR BEFORE FUEL-BURNING EQUIPMENT IS USED.

WARNING

BEFORE FUELING YOUR BOAT ENSURE ANY STATIC ELECTRICITY IS DISCHARGED BY TOUCHING AN UNPAINTED METAL SURFACE WITH THE FILLER NOZZLE. REMEMBER THAT A STATIC SPARK WILL IGNITE FUMES, CAUSING A FLASH FIRE. DO NOT SMOKE OR USE AN OPEN FLAME WHEN FUELING THE BOAT.

WARNING

REGULARLY INSPECT FUEL SYSTEMS FOR LEAKAGE. FUEL SYSTEM HOSES SHOULD BE INSPECTED AT LEAST ANNUALLY AND REPLACED IF ANY DETERIORATION OR DAMAGE IS FOUND. IF FUEL LEAKAGE IS PRESENT, HAVE THE SYSTEM REPAIRED BEFORE FURTHER USE. FUEL SYSTEM REPAIRS SHOULD ONLY BE MADE BY COMPETENT PERSONNEL.

** DANGER**

NEVER USE A FLAME TO CHECK FOR LEAKS.

 DANGER

IF A FUEL LEAK OR FUMES ARE DETECTED, DO NOT START THE ENGINE. ENSURE ALL CREW LEAVE THE BOAT AND HAVE A QUALIFIED PERSON REPAIR THE FAULT AS SOON AS POSSIBLE.

BATTERY** DANGER**

1. AVOID SPARKS AND EXPOSED FLAMES NEAR BATTERY. IT MAY EXPLODE.
2. KEEP BATTERY TERMINALS PROTECTED SO AS TO AVOID A SHORT CIRCUIT OR CONTACT WITH ANY METAL OBJECTS.
3. TURN OFF THE ENGINE WHEN INSPECTING OR SERVICING THE BATTERY.
4. NEVER KEEP THE BATTERY CLOSE TO A FUEL TANK, FILLER OR FUEL SYSTEM COMPONENTS.



FIRE-FIGHTING EQUIPMENT

It is the owner/operator's responsibility to have appropriate fire extinguishers in serviceable condition and readily accessible on board as prescribed by local requirements. At least one portable extinguisher type 34 B shall be present on board. The storage compartment of a portable fire extinguisher is marked by the symbol shown in Fig. 4.



Fig.4. Symbol of designated place of portable fire extinguisher.

This boat, when in service, shall be equipped with portable fire extinguisher of the following extinguishing capacities and in the following recommended location:

Nº1 Location: Bow locker Fire rating: 34B

ELECTRICAL SYSTEMS - SAFETY RULES

- Check condition of battery and charging system before departure.
- When the electrical system is in use check that individual components are working satisfactorily.
- Disconnect and remove the battery when the craft is in winter storage (cold weather areas) or long term storage.

 **WARNING**

NEVER WORK ON THE ELECTRICAL INSTALLATION WHILE THE SYSTEM IS ENERGIZED.

 **WARNING**

NEVER MODIFY THE CRAFT'S ELECTRICAL SYSTEM; INSTALLATION AND MAINTENANCE SHOULD ONLY BE PERFORMED BY A QUALIFIED MARINE ELECTRICAL TECHNICIAN.

 **WARNING**

NEVER ALTER OR MODIFY THE RATED CURRENT AMPERAGE OF OVERCURRENT PROTECTIVE DEVICES.

 **WARNING**

NEVER INSTALL OR REPLACE ELECTRICAL APPLIANCES OR DEVICES WITH COMPONENTS WHICH EXCEED THE RATED CURRENT AMPERAGE OF THE CIRCUIT.

 **WARNING**

NEVER LEAVE THE CRAFT UNATTENDED WITH THE ELECTRICAL SYSTEM ENERGIZED, EXCEPT AUTOMATIC BILGE PUMP, FIRE PROTECTION AND ALARM CIRCUITS.



SAFETY

ENGINE STARTING

Make sure that the motor is not in gear before attempting to start.

MAN-OVERBOARD PREVENTION AND RECOVERY

Man-overboard prevention.

The working deck has an anti slip surface.

When the boat is underway, the operator and passengers should always occupy designated seating areas, using handles when necessary. Other parts such as seat backs, cleats, windscreen tops and rails can be used as handholds to reduce the risk of falling overboard.



WARNING

IF PASSENGERS ARE NOT IN DESIGNATED SEATING WHEN UNDERWAY THERE IS A RISK OF FALLING INSIDE THE BOAT OR OVERBOARD CAUSING SERIOUS INJURY OR DEATH.

Areas such as the bow step plate, the engine well, tube step ends should not be used as seating when the boat is underway.



MEANS OF REBOARDING

This boat is equipped with a foldable ladder (Fig. 5), which allows a person to reboard easily without any assistance.

Additional handle for assistance while re-boarding is located close to the ladder.

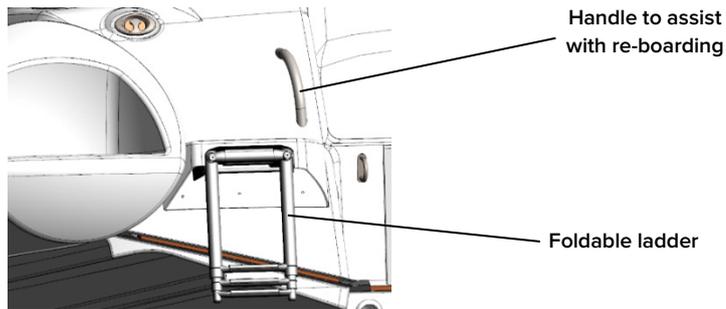


Fig. 5. Foldable ladder and handle for assistance with re-boarding.



SAFETY

DANGER FROM MOVING PARTS

Even in neutral, engine's propeller may rotate and may cause injury. If a person is in the water near the boat, immediately switch off the engine to avoid injury from the propeller rotation.



WARNING

KEEP AWAY FROM MOVING PROPELLER! IT COULD RESULT IN INJURY OR DEATH!



WARNING

DO NOT USE SWIMMING PLATFORMS WHEN ENGINE IS RUNNING!



SAFETY EQUIPMENT

The owner/operator is responsible for ensuring that appropriate safety equipment is onboard and is in proper working condition. The type of safety equipment and quantity will depend on the conditions expected and length of trip.

The type of safety equipment required will depend on local or national regulations. In most countries, safety equipment of the following type is required:

- Emergency Engine Kill Switch Lanyard.
- Personal Flotation Devices (PFD).
- Fire extinguisher.
- Horn or Whistle.
- Bilge pump (s).
- Visual Distress Signals.



CONSULT YOUR LOCAL DEALER REGARDING REQUIRED SAFETY EQUIPMENT IN YOUR COUNTRY/STATE BEFORE GOING AFLOAT.



SAFETY

In addition to the required safety equipment, we recommend tools as listed below. You can also ask your Dealer for any additional recommendations or advice based on local requirements.

RECOMMENDED EQUIPMENT

- An anchor with at least 25 meters of line.
- A manual bailing device for removing water from the boat (bucket, hand pump).
- A combination oar/boat hook.
- A day-and-night visual distress signal.
- A first aid kit and manual.
- An airway breathing tube.
- A waterproof flashlight.
- A set of local navigation charts.
- A whistle or non-electric horn.
- Mooring lines and fenders.
- Extra engine oil.
- A tool kit.
- A portable AM/FM radio or weather radio.
- Cell Phone with waterproof container.
- Binoculars.



SAFETY DRIVING RULES



WARNING

- DO NOT EXCEED THE AUTHORIZED NUMBER OF PERSONS OR MAXIMUM WEIGHT FOR THE CRAFT.
- MAKE SURE YOUR PASSENGERS REMAIN SEATED ON SEATS OR ON THE FLOOR. AVOID SITTING ON TUBES.
- AVOID BOW RIDING AS IT MAY BE ILLEGAL AND IS EXTREMELY DANGEROUS.
- DO NOT MAKE SHARP TURNS AT HIGH SPEEDS: YOU COULD BE EJECTED FROM THE BOAT.
- DO NOT MAKE VIOLENT CHANGES IN DIRECTION WITHOUT INFORMING PASSENGERS.



BOAT IDENTIFICATION

2. BOAT IDENTIFICATION

BOAT'S IDENTIFICATION NUMBER

Every boat has “Watercraft Identification Number” (WIN), which uniquely identifies your boat and is important for safety and identification purposes. The WIN is marked on a non-removable metal plate, which is fixed to the transom area of your boat (fig. 6).

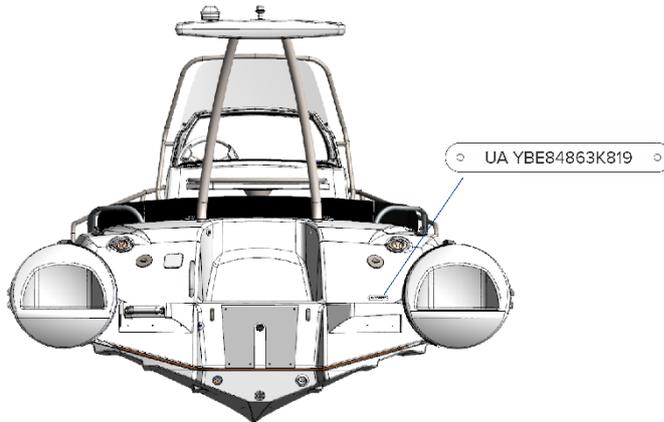


Fig. 6. Location of the WIN plate.



BUILDER'S PLATE

The builder's plate (fig.7), which is fixed to the craft, provides information about the Builder including builder's name, registered trade or trade mark plus contact name and address, CE marking, craft design category, maximum recommended load excluding the weight of the contents of the fixed tanks when full, number of persons recommended by the builder for which the craft was designed. This information may not however comprise a complete list: safety requirements (obligatory safety equipment carried on the boat, maximum authorized distance you can navigate from a port, etc.) may vary according to the country or state.

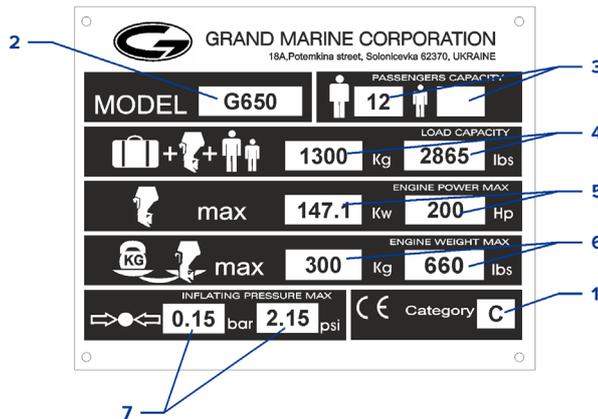


Fig.7. Builder's plate.

- 1 - Design category*
- 2 - MODEL: Catalogue name or model number.
- 3 - Maximum number of people authorized on board (adults + children) according to ISO and DIN standards.
- 4 - Maximum load capacity of the boat allowed by the builder and expressed in kilograms and lbs.
- 5 - Maximum outboard power allowed by the builder for the boat and expressed in kilowatts and HP.
- 6 - Maximum weight of outboard motor allowed by the builder expressed in kilograms and lbs.
- 7 - Nominal Pressure of the buoyancy tubes in Bar and Psi. Other parts of the boat may require different pressures. Refer to the "TUBE INFLATION" section in this manual.



BOAT IDENTIFICATION

Always refer to local regulations for information on additional requirements.

*Design category (European directive 2013/53/EU):

Category	C	D
Navigation	"Inshore"	"Protected water"
Wind speed (Beaufort scale)	Up to and including F6	Up to and including F4
Significant height of wave to consider (in meters)	Up to and including 2m	Up to and including 0.3m



BE RESPONSIBLE, TAKE NOTE AND DO NOT NAVIGATE IF THE CONDITIONS ARE LIKELY TO EXCEED THESE PARAMETERS.



3. BEFORE OPERATING YOUR CRAFT

WEATHER

Before starting any trip, check the local weather forecast. Depending on location and seasonal conditions, the weather can sometimes change very quickly. If the weather suddenly changes and conditions become rough:

- Try to find shelter as soon as possible because riding out a storm at sea can be extremely dangerous.
- Reduce speed whilst maintaining sufficient power to continue making headway.
- Check that all passengers have personal flotation devices and are sitting close to the boat's centerline.

CHECKLIST BEFORE DEPARTURE



MAKE SURE YOU HAVE ALL NECESSARY INFORMATION AND PASSENGERS ARE INFORMED.



BEFORE OPERATING YOUR CRAFT

GENERAL

1. **OBTAIN INFORMATION** on local regulations and hazards related to marine activities and boat operation.
2. **CHECK** weather forecast, local currents, tides and wind conditions.
3. **ADVISE** someone on land when you expect to be back.
4. **EXPLAIN** basic boat operation to all passengers.
5. **ENSURE** that at least one passenger is able to operate the craft and motor, provide training as needed.
6. **FAMILIARISE** all passengers with safety procedures and drills.
7. **LEARN** how to estimate the distance you can cover with a full tank of fuel. Always be sure you have enough fuel to reach your destination or a place of safety.
8. **CHECK** you have all necessary documentation and licenses.



WARNING

CHECK THAT THE BOAT AND ALL EQUIPMENT ARE IN GOOD WORKING ORDER.



CHECKING THE BOAT AND EQUIPMENT

- Using a pressure gauge, check inflation pressure in each section of the tube (gauge not supplied).
- Check the tightness of the outboard motor clamps or bolts.
- Remove the cockpit drain plug and check it is working correctly.
- Check the cockpit drain plug gasket, replace if necessary.
- Check that the fuel tank is correctly installed and secured.
- Top off fuel and lubricating oil levels to required levels. Note: do not overfill fuel tank.
- Check that sufficient fuel is available for your trip.
- Be sure the outboard motor is not in gear before attempting to start.
- Start the engine and check that the emergency kill switch functions correctly.
- Check the load is evenly distributed.
- Be sure that all navigation lights are in working order.
- Check that all required safety equipment is on board (horn, first aid kit, waterproof light, cell phone in watertight case, fresh water reserve etc.). See also “SAFETY EQUIPMENT” in the section “SAFETY”.
- Check that each passenger has his personal flotation device.
- Check that the boat is equipped with an additional flotation device for emergency use.
- Check that the boat is equipped with two oars/paddles. Check the condition of the oars and rowlocks.
- Be sure that you do not exceed the recommended maximum load indicated on the Builder’s plate.



BEFORE OPERATING YOUR CRAFT

- Make sure that each passenger is seated or has a seat available. Inform all passengers regarding the necessity to hold on to safety handles or lines.
- Be sure that the boat is equipped with at minimum 2 x boat length of suitable towing line.

RULES TO OBSERVE WHEN AFLOAT

- Be responsible: do not ignore safety rules.
- Make sure that you are always in control of your boat.
- Always operate your boat with courtesy and respect for others.
- Respect local regulations and practices.
- Near the shore, navigate within designated boating areas.
- Always be sure that you can reach shelter quickly.



DANGER

1. **WEAR PERSONAL FLOTATION DEVICE (PFD).**
2. **ALWAYS USE THE ENGINE KILL SWITCH LANYARD: WEAR IT AROUND YOUR WRIST, ANKLE, OR AFFIX TO YOUR CLOTHES.**



DANGER

3. DO NOT USE ALCOHOL / DRUGS BEFORE OR WHILE OPERATING YOUR BOAT.
4. DO NOT EXCEED THE AUTHORIZED NUMBER OF PERSONS OR BOAT'S MAXIMUM WEIGHT.
5. MAKE SURE YOUR PASSENGERS REMAIN SEATED ON SEATS OR ON THE FLOOR. AVOID SITTING ON TUBES.
6. DO NOT ALLOW BOW RIDING AS IT MAY BE ILLEGAL AND IT IS EXTREMELY DANGEROUS.
7. BE ESPECIALLY CAREFUL WHEN DOCKING: ARMS AND LEGS MAY BE INJURED IF THEY ARE OUTSIDE THE BOAT.
8. KEEP CLEAR OF SWIMMERS AND DIVERS: ALWAYS AVOID AREAS WHERE DIVERS/SWIMMERS ARE PRESENT. KEEP A SHARP LOOKOUT ESPECIALLY WHEN OPERATING NEAR BEACHES AND BRIDGES. SHUT OFF THE MOTOR WHEN OPERATING NEAR SOMEONE IN THE WATER. THE INTERNATIONAL CODE FLAG ALPHA INDICATES PROXIMITY OF DIVERS. MAINTAIN A SAFE DISTANCE (MINIMUM 50 METERS) AT ALL TIMES.
9. AVOID SHARP TURNS AT HIGH SPEEDS: YOU COULD BE EJECTED FROM THE BOAT.
10. DO NOT MAKE VIOLENT CHANGES IN DIRECTION WITHOUT INFORMING PASSENGERS.
11. BATTERY:
 - A. AVOID SPARKS AND OPEN FLAMES NEAR BATTERIES. THERE IS A DANGER OF EXPLOSION.



BEFORE OPERATING YOUR CRAFT

- B. KEEP BATTERY TERMINALS PROTECTED FROM SHORT-CIRCUITS AND CONTACT WITH METAL OBJECTS.
- C. TURN OFF THE ENGINE WHEN INSPECTING OR SERVICING THE BATTERY.
- D. NEVER KEEP A BATTERY CLOSE TO A FUEL TANK, FILLER OR FUEL SYSTEM COMPONENTS.



DANGER

1. MAKE SURE THAT THE INFLATABLE TUBE DOES NOT COME INTO CONTACT WITH SHARP OBJECTS, AGGRESSIVE LIQUIDS OR CHEMICALS.
2. INSPECT THE STEERING SYSTEM: AN IMPROPERLY MAINTAINED SYSTEM MAY FAIL, CAUSING SUDDEN LOSS OF CONTROL.
3. AVOID RISKS OF EXPLOSION OR FIRE HAZARDS: ENSURE YOUR FUEL SYSTEM IS IN GOOD ORDER WITH NO LEAKS OR GASOLINE VAPOURS, AND MAINTAIN IT PROPERLY.
4. AVOID SMOKING WHEN ON BOARD.



4. OPERATING THE CRAFT

TUBE INFLATION

Inflation valve.

The boat is equipped with a valve as shown in figure 8.

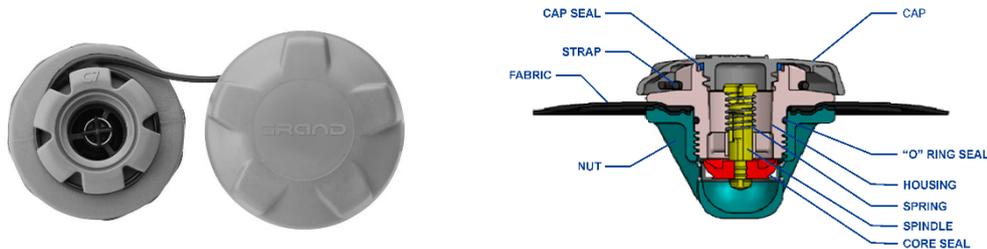


Fig 8. Inflation valve.

To inflate the tube chamber, first open the valve cap by turning it about half a turn counter clockwise (fig. 9). The spindle should be in the upper (closed) position.



OPERATING THE CRAFT

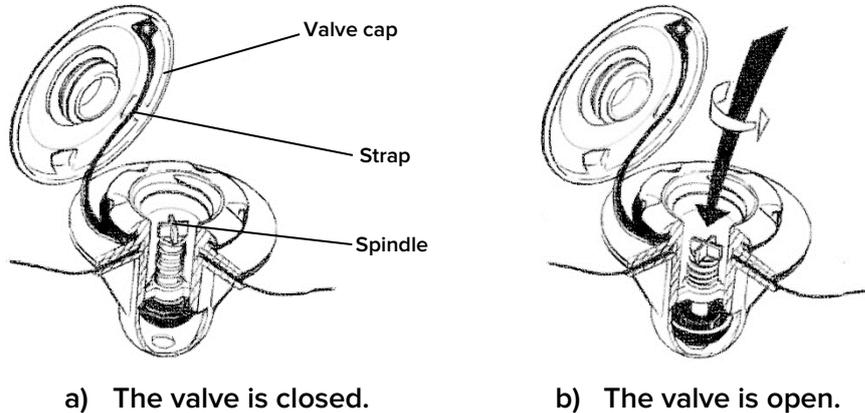


Fig.9. Design of the inflation valve.

When the spindle is in the normal (closed) position, the valve operates as a check valve and opens when air is pumped into the tube.

To release air from the tube, press down and hold the spindle. If you need to fully deflate the tube, press and turn the spindle counter clockwise to lock it in the "open" position.



To inflate the tube chambers, use the foot pump (fig.10) supplied.



Fig. 10. Foot pump.



Fig. 11. Special adapter.

Insert the end of the hose into the inflation valve using one of the adapters supplied (fig. 11).

Make sure the adaptor makes an air-tight connection with the valve and inflate using foot pump.

To inflate the tube, you can also use a small electric boat pump.



IF YOU USE A SMALL ELECTRIC PUMP, COMPLETE THE PROCEDURE BY USING THE FOOT PUMP TO REACH THE REQUIRED NOMINAL PRESSURE.



OPERATING THE CRAFT

Begin the inflation procedure according to the sequence shown in figure 12. Initially, partially inflate each chamber (approx. 0.1 bar (1.45 psi)) then repeat the procedure inflating each chamber to its nominal pressure, 0.15 bar (2.15 psi).

The nominal pressure is 0,15 bar (2,15 psi).

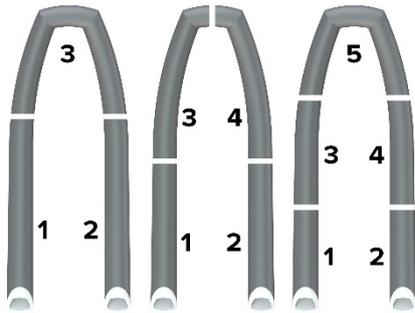


Fig. 12. Tube inflation sequence.

Check the pressure in each chamber with a pressure gauge. If you do not have a pressure gauge the following procedure will serve as a guide. Press a finger firmly against the tube – if the tube is depressed by about 10 mm ($\frac{3}{8}$ inch) this indicates that the pressure is approximately correct.

After the tube chambers have been inflated to the nominal pressure replace the valve caps. Fit the caps to the valve body and turn clockwise until secure.



Valve caps protect the valves from accidental opening, provide a secondary seal and protect the valves from contamination.

The valves require little maintenance. Keep them clean using a standard household cleaner.

Remember that changes in ambient temperature will change the inflation pressure within the tube. A tube that is over-inflated in the morning can be damaged by a significant increase of temperature in the afternoon.

WARNING

IF THE PRESSURE WITHIN THE TUBE BECOMES EXCESSIVE, THE GLUED SEAMS MAY BE DAMAGED.

If the ambient temperature rises significantly or you intend leaving the boat in direct sunlight, we recommend you relieve the air pressure in each chamber. It is strongly recommended that the boat be kept in the shade or under cover when not in use.

CAUTION

DO NOT USE SOURCES OF HIGH PRESSURE COMPRESSED AIR FOR INFLATING THE TUBE. EXCESSIVE PRESSURE CAN DAMAGE THE GLUED SEAMS AND THE INTERNAL WALLS.



OPERATING THE CRAFT

OVERPRESSURE VALVE (IF FITTED)

Overpressure valves can be fitted to buoyancy tubes as shown in figures 13.

It serves to protect the tube from over inflation and excess pressure build up due to solar heat.



Without strainer

With filter cap

Fig. 13. Overpressure valve.

Ultrafine mesh of the filter cup prevents contamination without affecting the pressure relief function. The filter cap can be easily removed for cleaning.



MOTOR INSTALLATION

Information about motor trim is given for reference purposes only.

The engine manufacturer's dealer or authorized agent should undertake installation of the motor on your boat.

The optimum position is with the propeller axis parallel with the water.



Fig. 14. Optimum trim.



OPERATING THE CRAFT

If the motor is tilted too far outwards from the transom, the boat will tend to porpoise.



Fig. 15. Trim up.

Motor tilted inwards too near the transom: the boat will bow down.



Fig.16. Trim down.

Please refer to the manual supplied by engine manufacturer before operating the engine and craft.



FUELING

The fuel system consists of a fuel tank (the volume is given in the technical data sheet), sender and fuel level gauge (optional), filler neck and fuel cap.

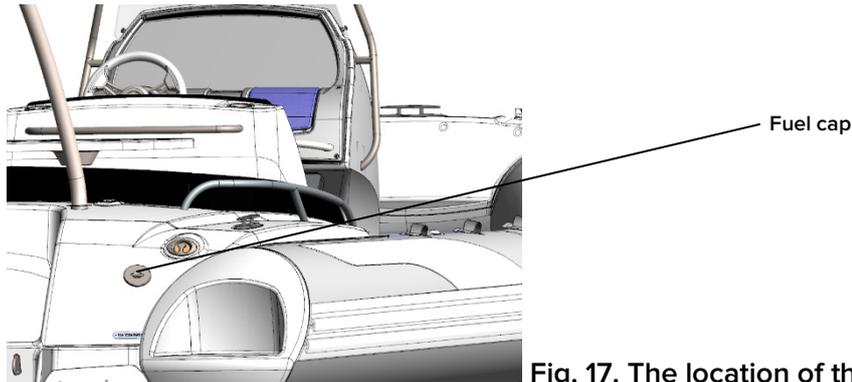


Fig. 17. The location of the fuel cap on the rear deck.

BEFORE FUELING

- Check the engine manufacturer's manual for information about the correct type of fuel be used for proper and long-term trouble-free operation.
- Turn off the engine.
- Turn off the ignition.
- Be sure to extinguish any open flames.



OPERATING THE CRAFT

WHILE FUELING

- Keep hose nozzle in contact with the filler pipe to provide a ground against static sparks.
- Fill the tank slowly to avoid danger of spillage.
- Do not overfill the tank. Leave some room for the fuel to expand. In hot conditions, fill the tank to about 80% of its maximum capacity.

If fuel is spilt on the hull, use an ordinary, non-abrasive cleaner then wipe with a damp cloth and rinse the area with clean water. See also instructions given in “SERVICE AND MAINTENANCE” section.

EXPLOSIVE/FIRE HAZARD



IF A FUEL LEAK OR FUMES ARE DETECTED, DO NOT START THE ENGINE. ENSURE ALL CREW LEAVE THE BOAT AND HAVE A QUALIFIED PERSON REPAIR THE DEFECT AS SOON AS POSSIBLE.



CAUTION

USING POOR QUALITY OR UNSUITABLE FUEL CAN RESULT IN DAMAGE TO YOUR ENGINE!
IT IS PREFERABLE NOT TO STORE UNUSED FUEL FOR LONG PERIODS IN THE FUEL TANK AND
FUEL SYSTEM AS THIS CAN RESULT IN DAMAGE TO FUEL LINES, PUMPS AND FILTERS.

ENGINE START&STOP

Refer to the engine manufacturer's manual for correct procedures before using the engine.

CAUTION

BE SURE THE ENGINE IS NOT IN GEAR BEFORE ATTEMPTING TO START IT!



OPERATING THE CRAFT

ENGINE KILL SWITCH LANYARD

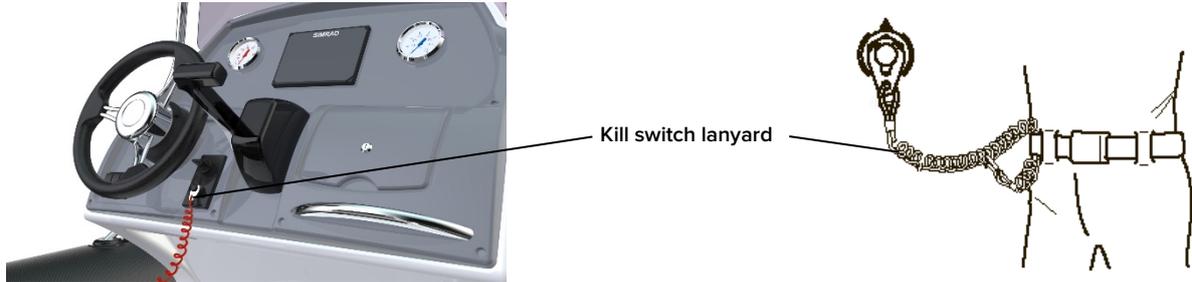


Fig. 18. Engine kill switch lanyard.

For safety reasons always use the engine kill switch lanyard.

The purpose of the engine kill switch lanyard is to turn off the engine if for any reason the operator is removed from the steering position.

The kill switch is located next to the ignition key.



WHEN THE ENGINE IS RUNNING, THE KILL SWITCH LANYARD SHOULD ALWAYS BE WORN ON THE WRIST, ANKLE, OR FIXED TO YOUR CLOTHES OR TO YOUR PERSONAL FLOTATION DEVICE. IGNORING THIS INSTRUCTION MAY CAUSE DEATH OR SERIOUS INJURY.



BATTERY ISOLATOR SWITCH

The battery isolator switch is designed to isolate the battery from the boat's electrical circuit.

It is used when the boat is in long-term storage to prevent the battery becoming drained, during maintenance (this should be done by qualified electrical technician. See also “ELECTRICAL SYSTEMS” in the section “SAFETY”) and in emergency cases.



Fig. 19. Battery isolator switch.

Specification:

Operating voltage: up to 48 Volt DC.

Nominal current: 250 A.

Max. current: 450 A - 5 min / 700 A - 10 sec.

The battery isolator switch is located on the internal side of the rear compartment in an accessible place for the operator. It should be accessible at all times for disconnecting all devices from the battery.

The battery must **NEVER** be disconnected from the engine when it is running!



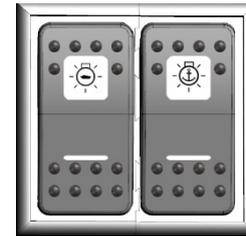
OPERATING THE CRAFT

SWITCH PANEL

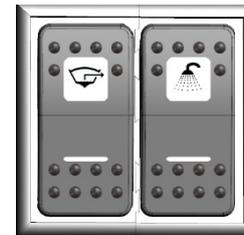
Use the following switches located on the steering console to switch on/off a horn, navigation lights, anchor/all-round light, bilge pump and shower.



Horn



Navigation lights
Anchor/all round light



Bilge pump Shower

Fig. 20. Switch panel.



FUSE BOARD

The fuse board is located inside of steering console. To access it, lift the forward door of the steering console.

To change a fuse, unlock and open fuse board transparent cover. Pull out a blown fuse and replace it with a new one. Close the fuse board cover.

A rating of relevant fuses are given below.



Circuit	Fuse rating, A
Horn	5
Navigation lights	5
Anchor/top light	5
Bilge pump	3
Shower pump	5
USB socket	2

Fig. 21. Fuse board.



OPERATING THE CRAFT

AUTOMATIC BILGE PUMP

The automatic bilge pump serves to pump water out of the bilge area of the boat.



Fig. 22. Bilge pump.

The bilge pump (Fig. 22) is located inside of rear compartment next to the hull drain plug (Fig. 23).



BILGE PUMP LOCATION



Fig. 23. Location of the bilge pump.



OPERATING THE CRAFT

Pump specifications:

Capacity 1.9 m³/h (with zero head).

Power 13.6 V/1.5 A.

Maximum head 2.44 m.

Connection 3/4".

Overall dimensions 14x8x10 (LxWxH) cm.

Switching the bilge pump on and off is done manually by using the switch located on the steering console and automatically by a built-in mercury-free float type switch.

Check the operation of the bilge pump either by using the switch located on the steering console or by turning the test knob, located on the pump in a clockwise direction. Make sure the inlet channels are free from contamination (see also sections - "SAFETY", "RISK OF FLOODING AND STABILITY", "SAFETY EQUIPMENT").



ELECTRICAL HORN

The horn serves as a warning to other craft and individuals when setting off, mooring or in other safety related situations.

The horn is mounted on the steering console or on the navigation arch (if fitted).

The horn is switched on/off by means of a switch located on the steering console. To use the horn press and hold the switch. Release the switch to turn the horn off.

Electrical horn

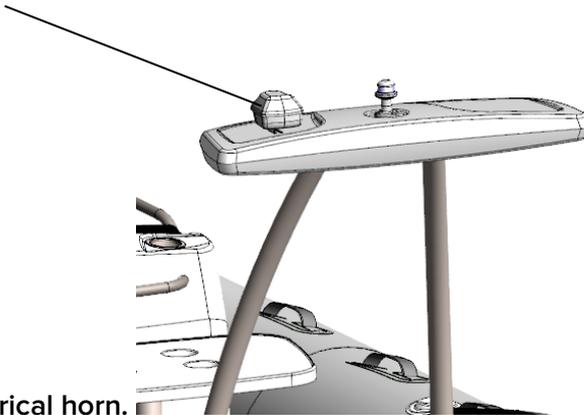


Fig. 24. Electrical horn.

Before making a trip, check the horn is functioning by briefly switching it on and off.



OPERATING THE CRAFT

NAVIGATION LIGHTS

Navigation lights are designed to indicate the craft's relative position, the nature of its movement or it's location at night. The side lights are a green light on the starboard side and a red light on the port side.

Navigation lights are located on the bow step plate (side lights) and on the arch (all-round) light.

Use the switch on the steering console to turn the navigation lights on/off when needed.

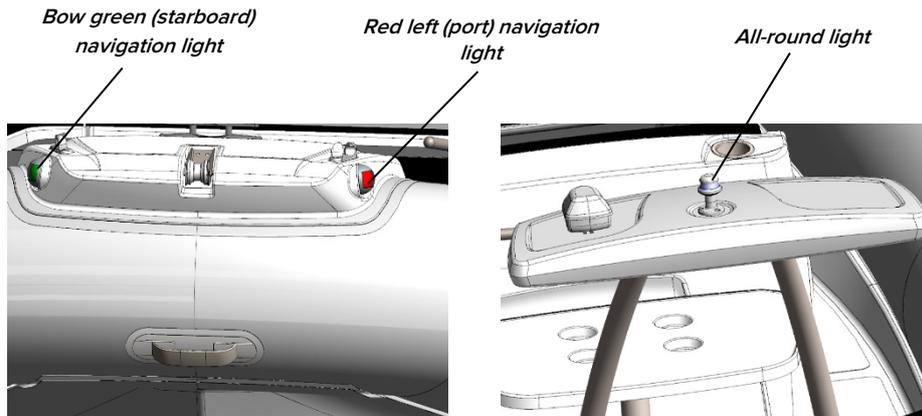


Fig. 25. Navigation lights.



HULL DRAINAGE



NEVER OPEN THE HULL DRAIN PLUG WHEN AFLOAT.

To drain the hull remove the plug (fig. 26).

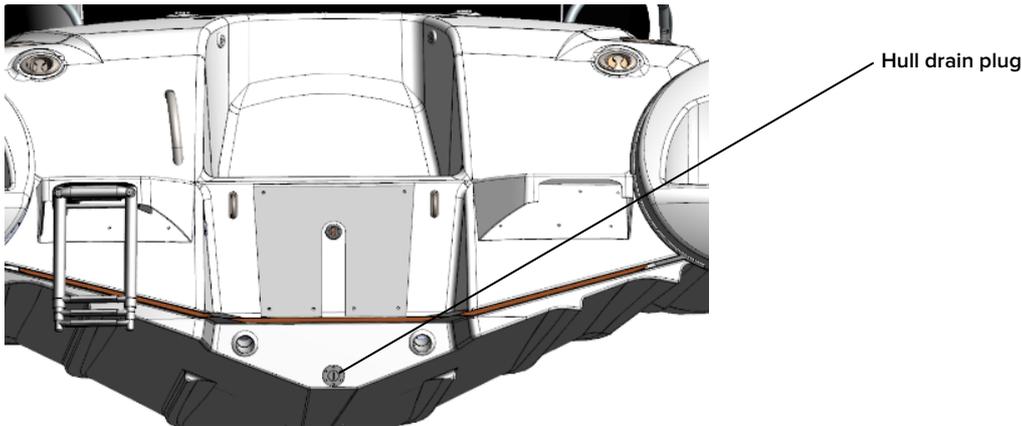


Fig. 26. The hull drain plug is located on the transom.

After removal refit and re-tighten (do not over-tighten) the plug before using the boat.



OPERATING THE CRAFT

COCKPIT DRAINAGE



WHEN THE BOAT IS NOT IN USE, OPEN COCKPIT DRAIN PLUGS SO THE COLLECTED WATER (FROM RAIN OR SPLASHES, FOR INSTANCE) COULD BE EASILY DRAINED OUT THROUGH THE VALVES NOT CAUSING POTENTIAL DAMAGE TO THE INTERNAL COMPONENTS (E.G. BATTERY, WIRING, ETC).

The boat is equipped with two cockpit drain plugs located on the deck and two valves located at the transom.

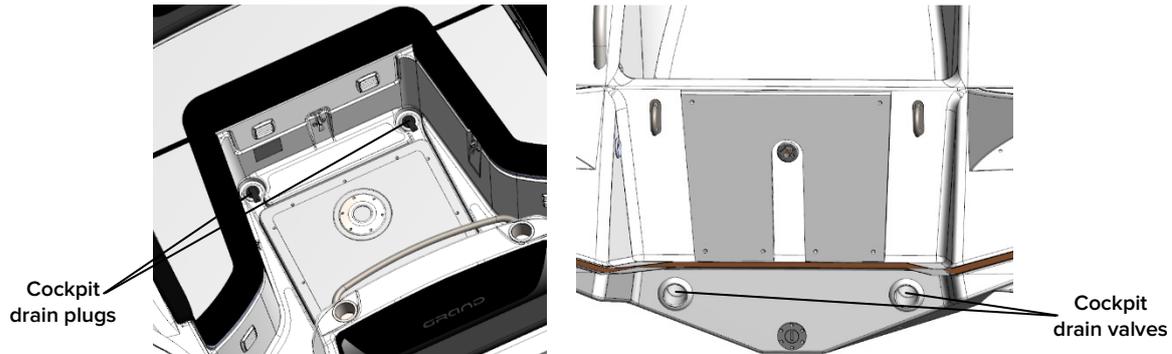


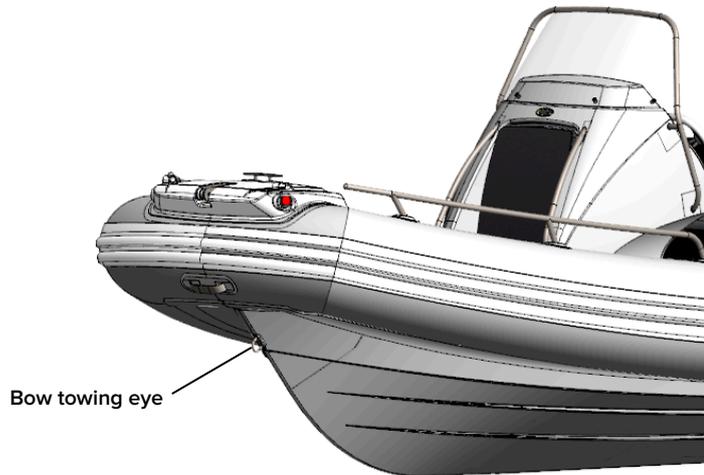
Fig. 27. Cockpit drain plugs and valves.



TOWING EYE

The towing eye is located at the bow.

Breaking strength of bow towing eye is 20 kN.



THE BREAKING STRENGTH OF LINES SHALL IN GENERAL NOT EXCEED 80% OF THE BREAKING STRENGTH OF THE BOW TOWING EYE.

Fig. 28. Bow towing eye.



OPERATING THE CRAFT

LIFTING EYES

The boat is fitted with lifting eyes at the bow and rear (fig. 29, 30). Use these eyes to lift the boat.

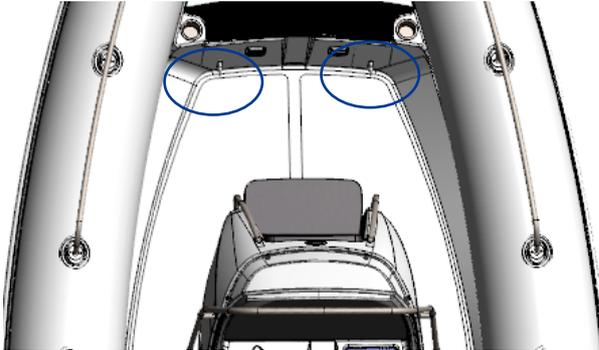


Fig.29. Bow lifting eyes, 2 positions.

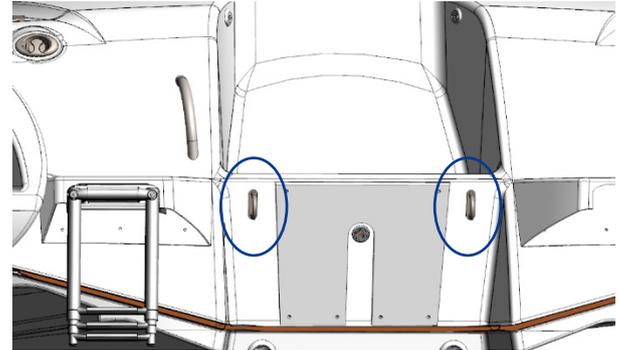


Fig. 30. Rear lifting eyes, 2 positions.



BOW LOCKER

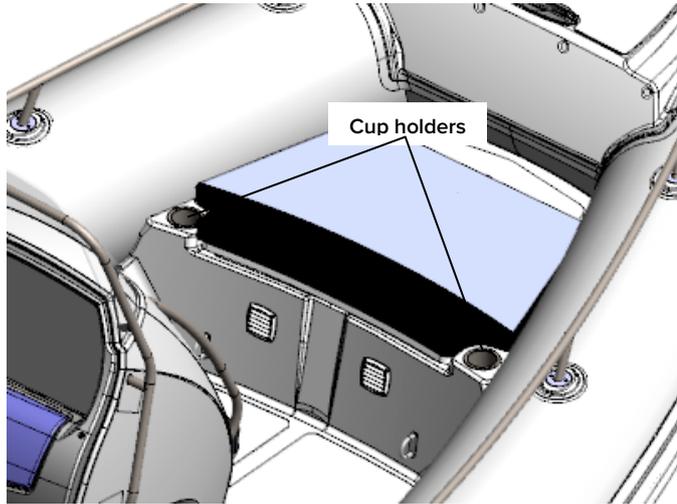


Fig. 31. Bow locker with anchor compartment and hatch.



OPERATING THE CRAFT

HELM AND PASSENGER DOUBLE SEAT

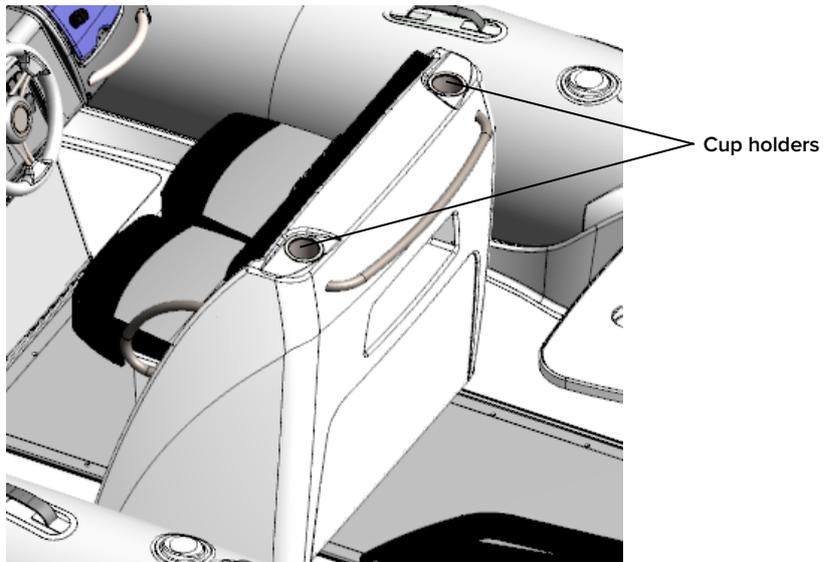


Fig. 32. Helm and passenger double seat with foldable seats.



U-FORM REAR SOFA-STYLE SEATING

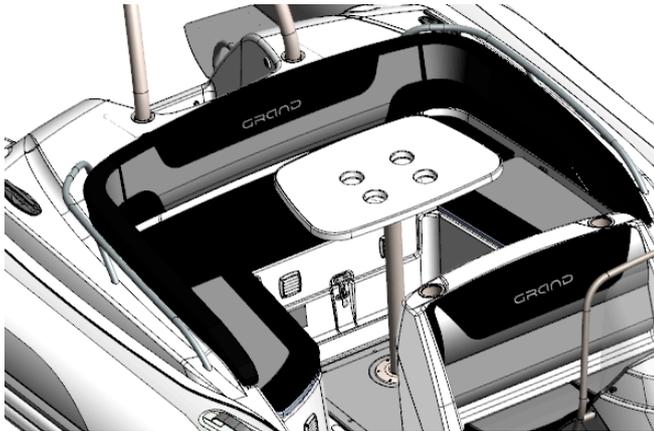


Fig. 33. U-form rear sofa-style seating.

The sofa-style seating is fitted with soft cushions and high seat back.

Two side lockers are located below the seats.



OPERATING THE CRAFT

REAR LOCKER AND REAR SIDE ANCHOR/ROPE HATCHES

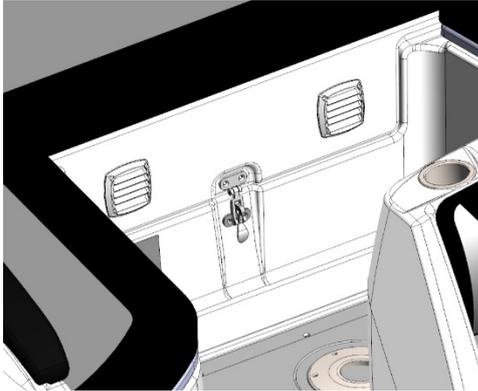


Fig. 34. Rear locker with large access panel.

Panel is supported by gas springs.

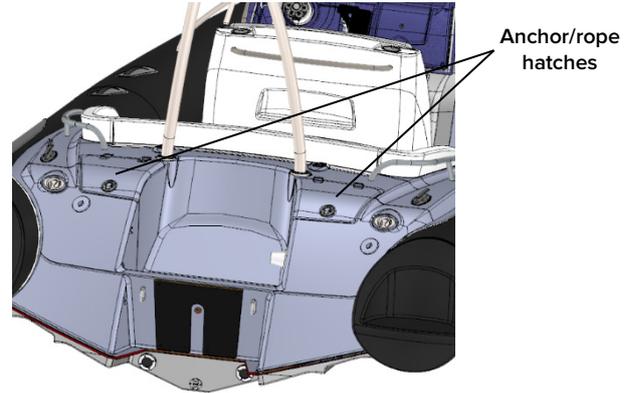


Fig. 35. Rear side anchor/rope hatches.



REMOVABLE SUNDECK WITH CUSHION (IF APPLICABLE)

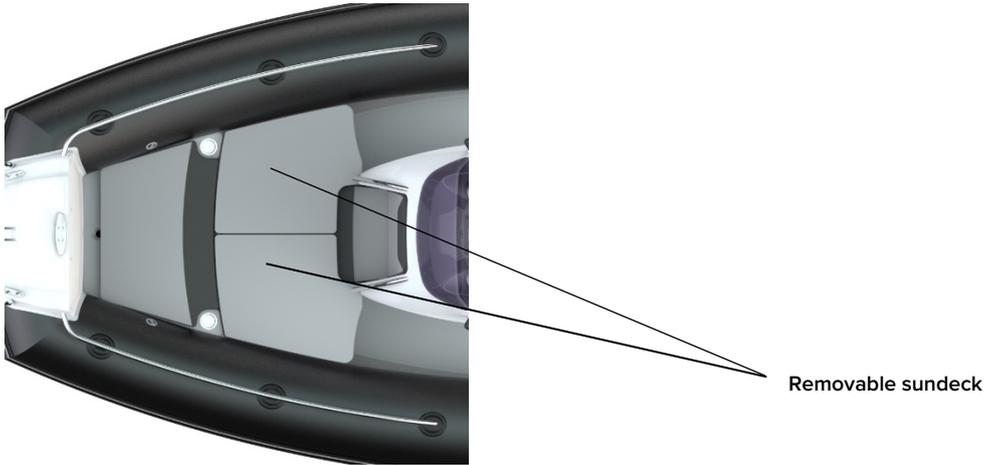


Fig. 36. Removable sundeck.



CAUTION

ALWAYS STORE REMOVABLE SUNDECK INSIDE THE STORAGE COMPARTMENT IF YOU ARE PLANNING TO CRUISE AT MORE THAN 15 KNOTS.



OPERATING THE CRAFT

REMOVABLE REAR SUNDECK WITH CUSHION AND REAR SUNDECK EXTENSION (IF APPLICABLE)

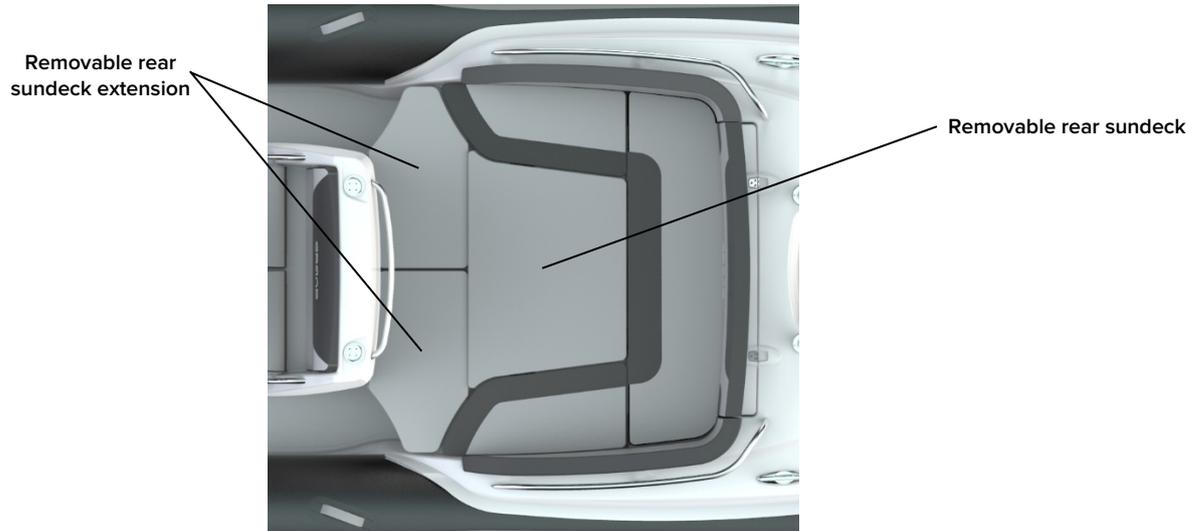


Fig. 37. Removable rear sundeck.



CAUTION

ALWAYS STORE REMOVABLE REAR SUNDECK INSIDE THE STORAGE COMPARTMENT IF YOU ARE PLANNING TO CRUISE AT MORE THAN 15 KNOTS.



REMOVABLE TABLE (IF APPLICABLE)



Fig. 38. Removable table with 4 cup holders.

Assemble the tubular pylon and table top then insert into the table holder located in the deck.



WARNING

ALWAYS STORE A REMOVABLE TABLE INSIDE THE STORAGE COMPARTMENT IF YOU INTEND TO CROUISE AT MORE THAN 15 KNOTS.



OPERATING THE CRAFT

STAINLESS STEEL RAILS (IF APPLICABLE)

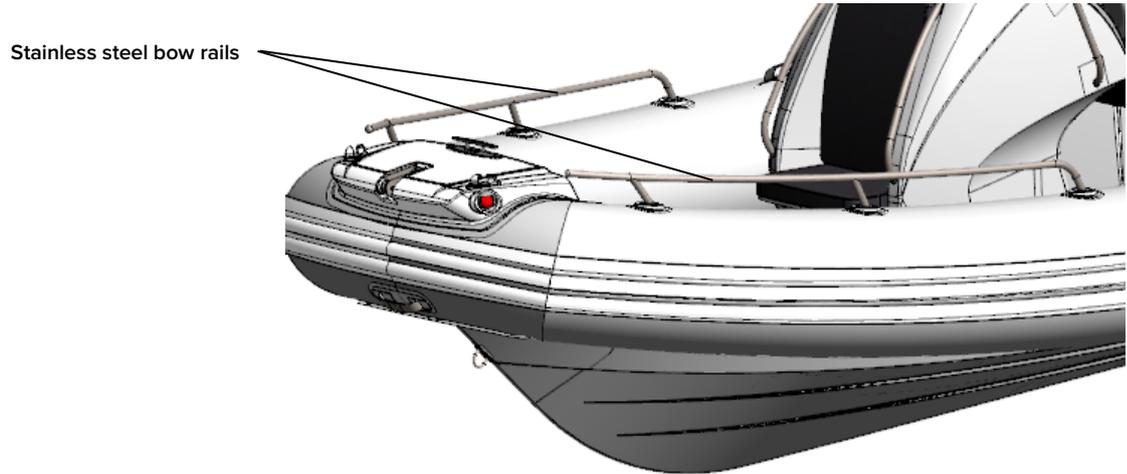


Fig. 39. Stainless steel bow rails.



CAUTION

NEVER USE THE RAILS FOR MOORING.

TIE-UP ONLY TO THE CLEATS.



COLLAPSIBLE BIMINI TOP (IF APPLICABLE)



Fig. 40. Collapsible bimini top.

CAUTION

USE A BIMINI TOP WHEN YOUR BOAT IS NOT IN MOTION. KEEP BIMINI TOP IN STOWED POSITION IF YOU PLANNING TO CRUISE AT MORE THAN 20-25 KNOTS.



OPERATING THE CRAFT

SWIMMING PLATFORM (S) WITH FOLDING LADDER

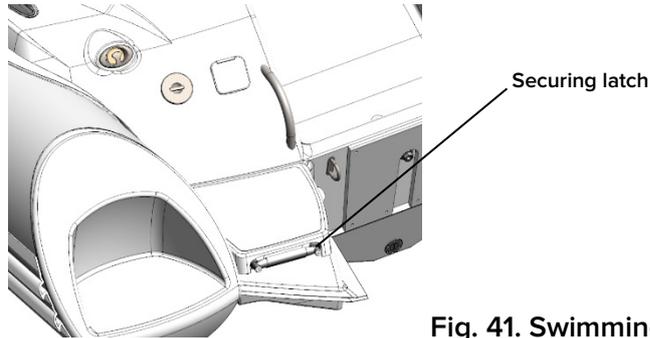


Fig. 41. Swimming platform with folding ladder.

CAUTION

CHECK THE FOLD-DOWN SECURING LATCH IS IN PLACE BEFORE BEGINNING A TRIP OR TRAILERING THE BOAT.

WARNING

DO NOT USE SWIMMING PLATFORMS WHEN ENGINE IS RUNNING!



WATER SHOWER SET (IF APPLICABLE)

A pump and 50-liter tank available.

Use the switch on the steering console to turn a shower system on/off.

To use a shower, press and hold the button located on the shower handle.

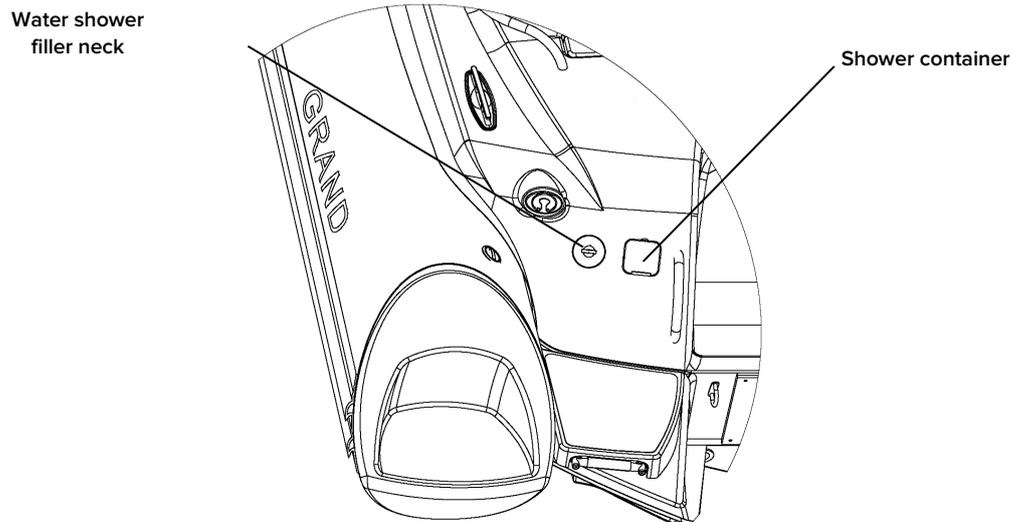


Fig. 42. Water shower set.



OPERATING THE CRAFT

ANCHORING AND MOORING

ANCHORING

Please make sure your craft is equipped with an appropriate anchor and line. If you are not sure, ask your Dealer who will be happy to advise. Setting-up a securing anchorage requires knowledge and practice so it is important that properly trained persons undertake this procedure.

ANCHOR ROLLER (if applicable)

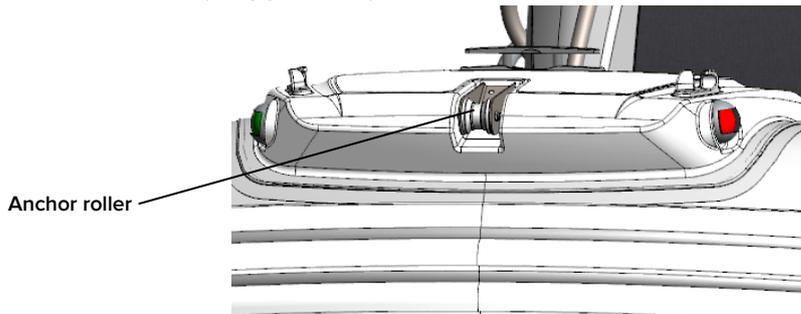


Fig. 43. Anchor roller.

The anchor roller serves for handling and locating the anchor line. The anchor roller is located on the bow plate.

When anchoring your boat make sure you are not creating a potentially dangerous situation for yourself, other boats or people.



WARNING

**ANCHOR ONLY IN AREAS WHERE YOUR BOAT WILL NOT HINDER OTHER BOATS.
DO NOT ANCHOR IN A CHANNEL!**

Before anchoring the boat, stop the engine. If an anchor windlass is fitted, consult the manufacturer's manual.

When anchoring be aware that the condition of the sea bed, changes in tide, wind strength and direction and currents will affect the position of the craft. Use local landmarks to obtain an approximate fix for the craft's position and check this regularly.

When not in use, ensure the anchor and line are stored in the anchor locker.



OPERATING THE CRAFT

MOORING

Use the bow and rear pull up cleats for mooring.

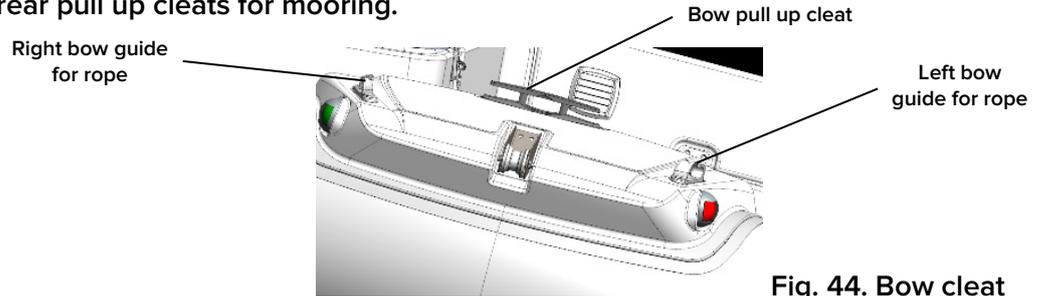


Fig. 44. Bow cleat and guide.

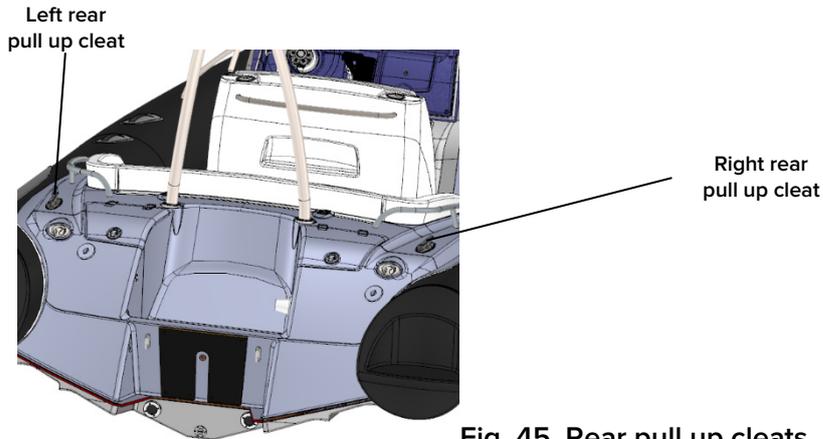


Fig. 45. Rear pull up cleats.



When the boat is moored or parked the cockpit drain plugs should remain open. This will ensure rain water does not accumulate in the boat.

Breaking strength, kN	
Bow cleat	16
Rear cleat	14

CAUTION

THE BREAKING STRENGTH OF LINES SHALL IN GENERAL NOT EXCEED 80% OF THE BREAKING STRENGTH OF THE RESPECTIVE STRONG POINT.

CAUTION

BE VERY CAREFUL WHEN MOORING: ARMS AND LEGS MAY BE INJURED IF THEY ARE OUTSIDE THE BOAT.



OPERATING THE CRAFT

WATERSKI TOWING ARCH WITH TOWING EYE (IF APPLICABLE)

Always observe safe driving procedures when towing a water skier.

For information about waterski towing procedures contact your local power boat school or yacht club.

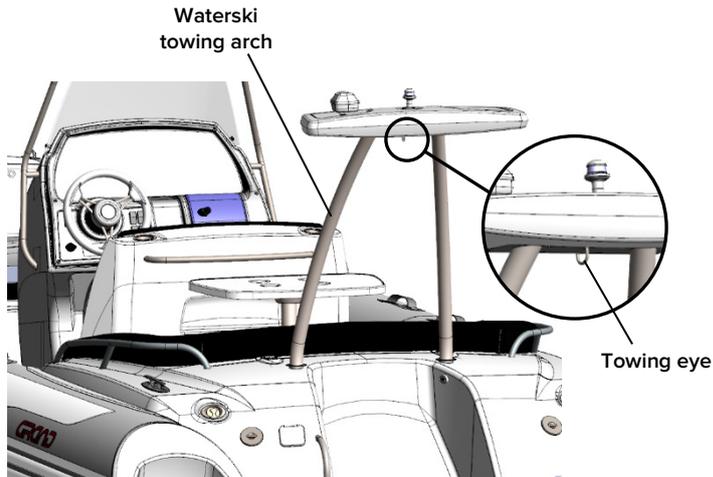


Fig. 46. Waterski towing arch.

WARNING

THE SAFE WORKING LOAD OF THE TOWING ARCH IS INDICATED ON A LABEL ATTACHED TO THE ARCH.

WARNING

NEVER ALLOW PASSENGERS TO SIT ON REAR SOFA WHEN TOWING A SKIER. SHOULD THE TOWROPE PART IT COULD BACKLASH INTO THE COCKPIT.

WARNING

DO NOT USE THE TOWING ARCH TO PULL A SKI TUBE.



LAUNCHING AND RECOVERING THE BOAT FROM THE WATER



Fig. 47. Fiberglass hull.

CAUTION

NEVER DRAG THE BOAT OVER A ROUGH SURFACE (ROCKS, STONES, CONCRETE, ETC) AS THE HULL AND TUBE CAN EASILY BE DAMAGED.

Regularly check the surface of the fiberglass hull. If the gel coat is damaged, contact your Dealer for repair.



OPERATING THE CRAFT

BEACHING

When approaching a beach or waters edge proceed slowly and with extreme caution.

Avoid hazards below the water surface such as rocks. Hazards can damage the hull, tube, motor, or propeller. Do not power the boat onto land as serious damage to the hull and tube may occur.

Do not drag the boat across rough or abrasive surfaces (rocks, concrete etc.). The hull and tube can be damaged.

TOWING

When towing an inflatable boat behind another craft, always connect the tow line to the bow eye. Do not tow using the bow handle or bow rail.

If possible use a double tow line when towing behind another boat. The second line acts as a backup in case one line breaks or comes undone.

Use a tow line of sufficient length so that there is at least two boat lengths between boats.

Use only line intended for towing, ask your Dealer for advice and select the correct line for your application (Do not tow with three strand nylon rope).



Fasten the towed boat securely and observe it continuously. Avoid towing a tender over long distances.

Do not use a tow line with signs of damage or wear. Check tow lines for wear and damage prior to use.

Always keep hands and feet clear of tow lines.

Be prepared to cast loose or cut the tow line if necessary.

Do not tow at high speeds or while planing.



CAUTION

1. TOWING MUST BE DONE AT LOW SPEED (NOT MORE THAN 10 KM/H) AND IN GOOD WEATER CONDITIONS WITH NO WAVES.
2. THE BOAT BEING TOWED MUST BE OBSERVED AT ALL TIMES.



TECHNICAL DETAILS

5. TECHNICAL INFORMATION

TECHNICAL SPECIFICATION

See the table below for technical specifications of G650.

Model	G650LF	
Specification	Unit	
Length overall	cm	650
	ft/inches	21' 4"
Length internal	cm	440
	ft/inches	14' 5"
Beam width	cm	265
	ft/inches	8' 8"
Width internal	cm	150
	ft/inches	4' 11"
Chambers	Number	5
Tube diameter	cm	55
	ft/inches	22"
Tube fabric		PVC/Hypalon
Bare boat weight*	kg	750
	lbs	1650
Full weight**	kg	860
	lbs	1892



Passenger capacity	Number	12
Maximum height (light craft)	m	0.68
	ft/inches	2' 23"
Maximum draft (fully loaded), from hull's underside lowest point	m	0.47
	ft/inches	1' 54"
Engine recommended	HP	150
	kW	110.3
Engine max	HP	200
	kW	147.1
Engine weight max	kg	300
	lbs	660
Engine shaft length	inches	20" (long)
Midsection / aft deadrise	degrees	25°20"
Built in fuel tank capacity	l	200

Note:

* - The bare boat weight is just a weight of the boat without any removable accessories.

** - The complete boat weight is the weight of the boat with all optional equipment, parts and accessories.



TECHNICAL DETAILS

STANDARD AND OPTIONAL EQUIPMENT

STANDARD EQUIPMENT:

- Deep-V fiberglass hull with transom extensions, bow towing eye and self-bailing cockpit.
- Inflatable tube with GRP step ends.
- Bow locker with anchor compartment and hatch.
- Bow step plate with nav. lights, anchor roller and cleat.
- Steering console CL-16, front seat with side rails, windshield with handrail, passenger grab handle and glove box.
- Helm and passenger double seat SD-11 with two folding seats.
- U-form rear sofa-style seating with two side lockers, soft cushions and high seat back.
- Rear locker with large access panel and gas springs.
- Rear handrails, two rear cleats and towing eyes.
- Built in fuel system with 200 liter tank and sender.
- 2 front and 2 rear lifting eyes.
- Maintenance kit, pump, 2 paddles and manual.



STANDARD EQUIPMENT FOR GRAND LUXE VERSION:

- Two swimming platforms with folding ladder.
- Electric package with nav. lights, bilge pump, electric horn, switches, battery switch and complete wiring.
- Stainless steel bow rails.

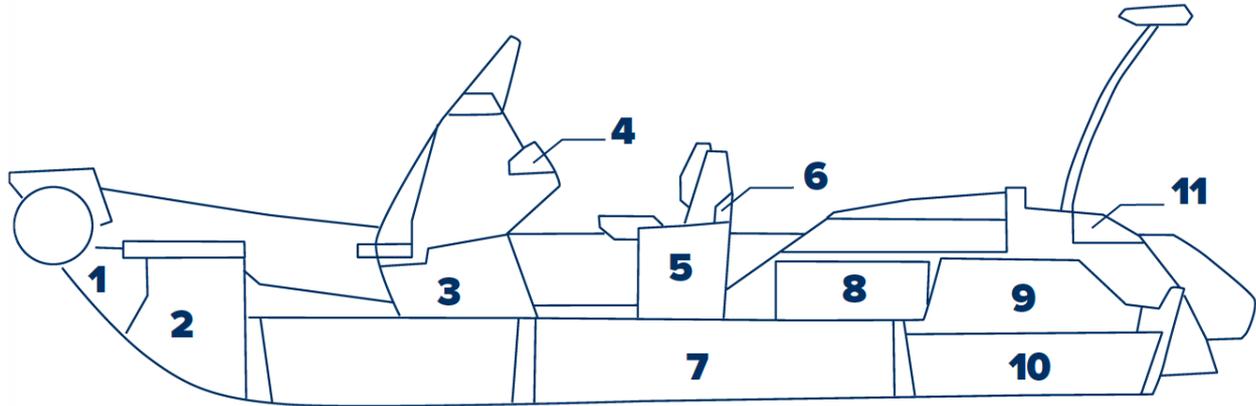
OPTIONAL EQUIPMENT:

- Bow sundeck, rear sundeck and rear sundeck extension.
- Keel and tube protector packages.
- Waterski towing arch with towing eye and GRP top.
- Removable table with 4 cup holders.
- Overall cover, console (CL-16), double seat (SD-11), rear seat and harbour (CL-16 & SD-11 and rear seat) covers.
- Water shower set with pump and 50 liter tank.
- Collapsible stainless steel bimini top.
- Two overpressure valves.
- SILVERTEX upholstery upgrade.
- SeaDek® antiskid set.



TECHNICAL DETAILS

COMPARTMENT CHART



- | | |
|--------------------------------|------------------------------|
| 1. Bow anchor locker | 7. Fuel tank compartment |
| 2. Bow locker | 8. Two side storage boxes |
| 3. Console storage compartment | 9. Main rear storage |
| 4. Glove box with hatch | 10. Lower rear storage |
| 5. Double seat storage | 11. Rear anchor/rope hatches |
| 6. Seat storage shelf | |

Fig. 48. Compartment chart.



GENERAL ARRANGEMENT OF A BOAT

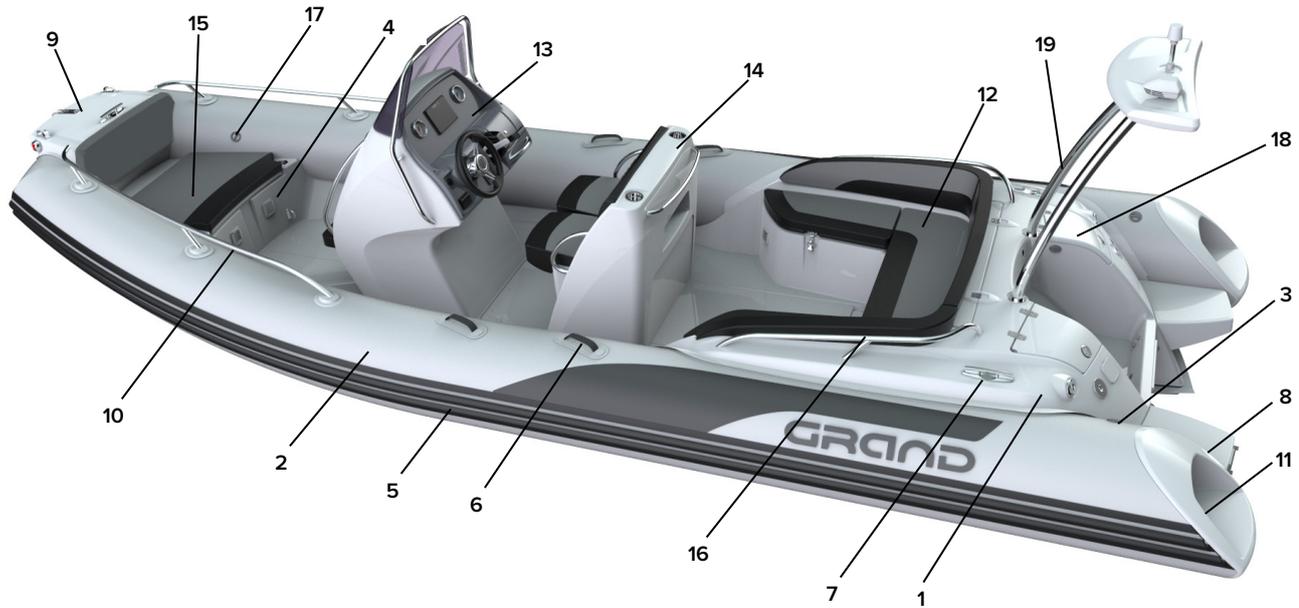


Fig. 49. General arrangement of a boat.



TECHNICAL DETAILS

General arrangement of a boat (see fig. 49 on the previous page):

1. Fiberglass hull.
2. Reinforced buoyancy tube.
3. Inflation/deflation valve.
4. Bow hatch.
5. Rubbing strake with splash guard.
6. Safety handle.
7. Pull-up cleat.
8. Swimming platform with foldable ladder.
9. Bow step plate.
10. Stainless steel bow railing.
11. Fiberglass step.
12. Rear seat back.
13. Steering console CL-16.
14. Container with front stowage, cushions, soft backs.
15. Bow locker removable cushion.
16. Rear seat extended handrails.
17. Overpressure valve.
18. Rear anchor/rope hatches.
19. Waterski towing arch with top.



STEERING CONSOLE COMPONENTS

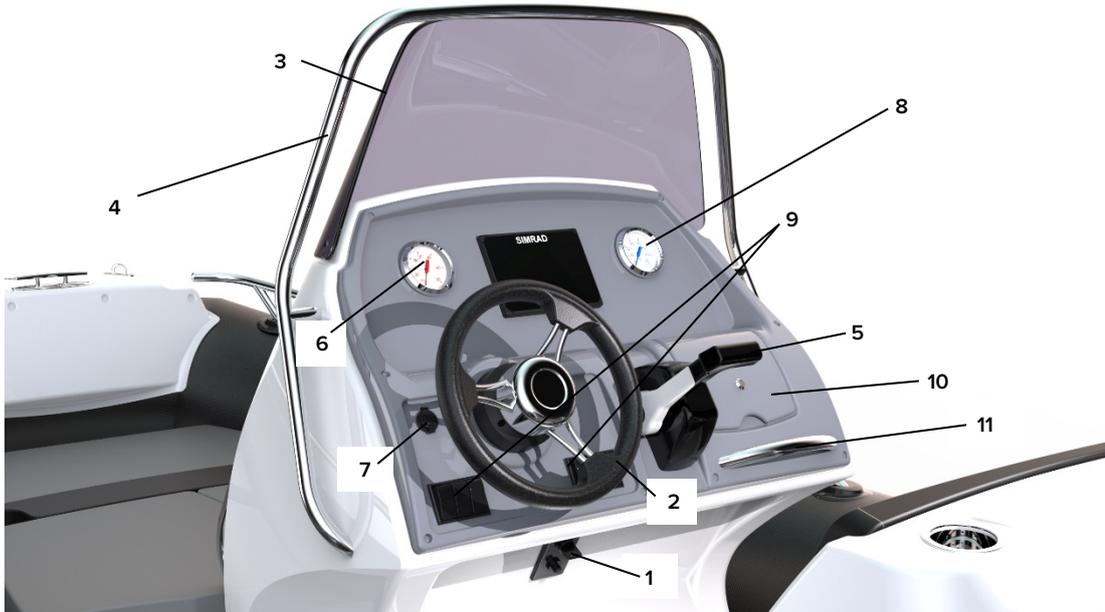


Fig. 50. Steering console components (see the list on the next page).



TECHNICAL DETAILS

Steering console components (see fig. 50 on the previous page):

Ignition key (1)

Steering system

Steering cable

Steering wheel (2)

Windshield (3)

Handrail (4)

Throttle lever (5) (optional*)

Speedometer (optional*) (6)

Double USB socket 5v (7)

Tachometer (optional*) (8)

Switches (9):

- Horn.
- Navigation light.
- Anchor/all-round light.
- Bilge pump.
- Shower pump.

Glove box with hatch (10)

Handle (11)

When your trip is finished, always remove the key from the ignition switch. This will prevent theft or unauthorized use of your boat.

* - The builder does not supply these components. Please contact your regional Dealer for the installation of required components.



GENERAL VIEW OF A BOAT

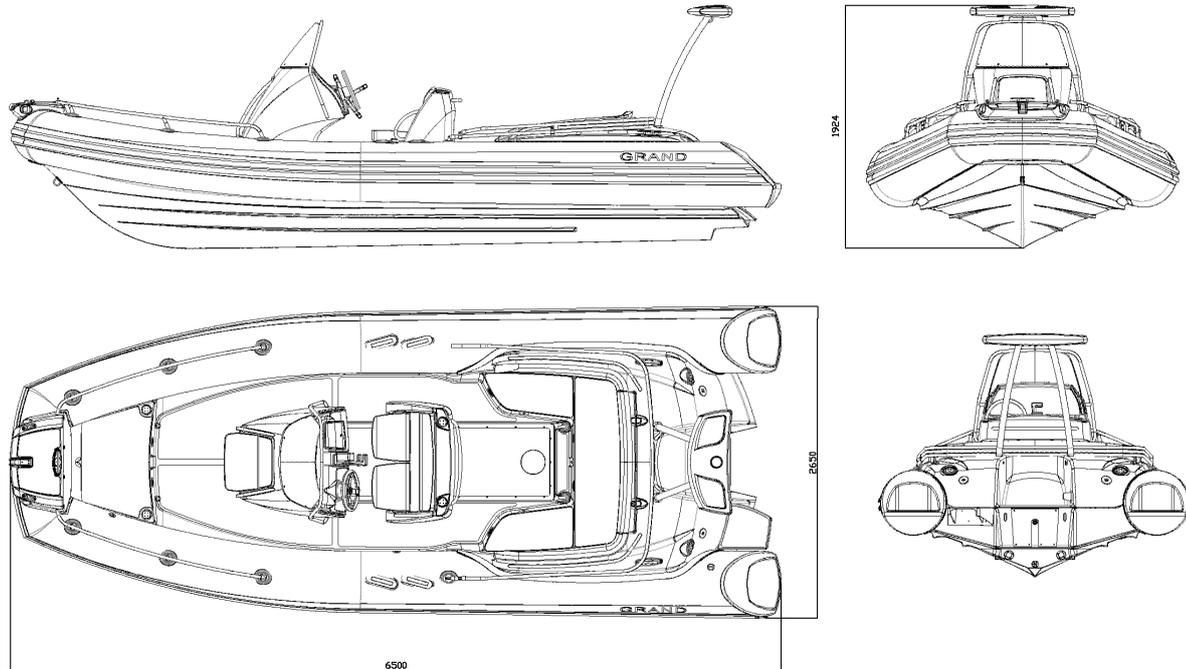


Fig. 51. General view of a boat.



LOADING PASSENGERS

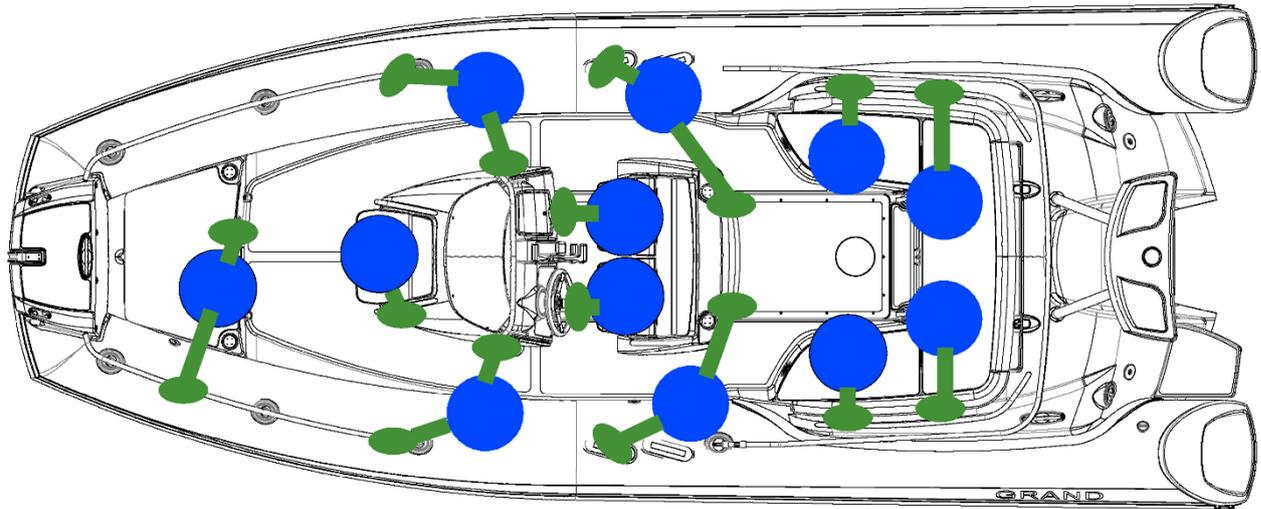


Fig.52. Recommended seating arrangement for 12 passengers.



ELECTRICAL SCHEMATIC DIAGRAM

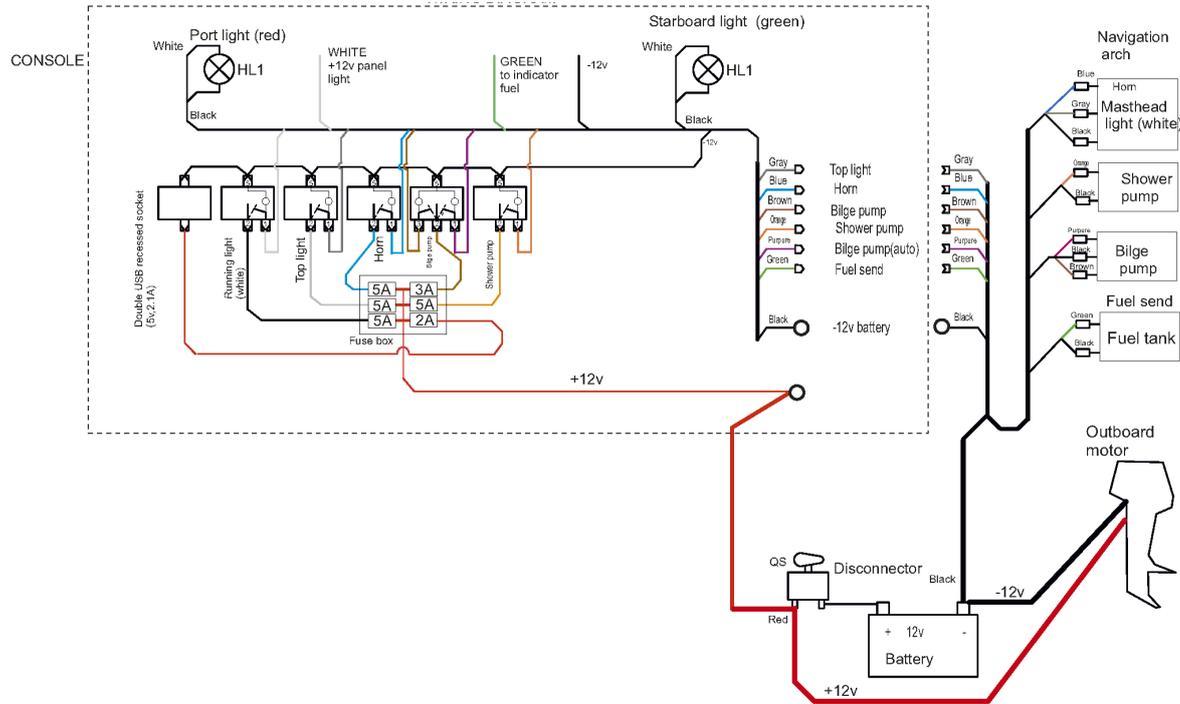


Fig. 53. Electrical schematic diagram.



SERVICE AND MAINTENANCE

6. SERVICE AND MAINTENANCE

CLEANING

- Regularly clean your boat and make sure this is done before winterizing.
- For cleaning use household cleaner (non abrasive) and fresh water only!
- At all times keep the inflatable tube, vinyl and other boat parts free of any chemical spills, such as:
 - Gasoline, grease, oil and any other oily product.
 - Suntan oils, lotions and any other body care products.
 - Pollution products, dirt and dust.
 - Silicon based products.
- If any of the above listed spills occur on the boat's surface clean and wash the boat or its relevant part as soon as possible, and only with approved liquids.
- When not in use keep your boat properly covered.
- Keep your boat away and properly protected against car's exhaust smoke pollution and heat: this may damage the boat.



CLEANING OF TUBE

An important factor for the long life of tube fabric is regular adequate cleaning.

The subsequent cleaning procedure is recommended:

- Rinse off with clear, tap water (approx. 20 °C).
- Use gentle soapy water (pH value neutral to slightly alkaline) to wash the tube by means of a soft cloth or brush. Do not leave the soapy water on the surface for more than 5 minutes.
- Clean the surface very thoroughly and make sure that no soap residue remains on the surface.
- Then dry by wiping off the surface with a soft cloth.



CAUTION

DO NOT USE:

- Any cleaning device that might cause mechanical damage to the surface such as hard brushes, high-pressure washers, etc.
- Any cleaning agents (scouring agents or scrubbing powder), which will damage the surface;
- Strong alkaline cleaning agents.
- Acid cleaning agents.
- Solvent based cleaning agents (e. g. based on ester, ketone, ether, furan or benzol).
- Petrol, diesel, kerosene.
- Self-made cleaning agents.
- Bleaching or oxidizing cleaning agents (e.g. containing hydrogen peroxide, sodium hypochlorite, chlorine dioxide or sodium dithionite).



SERVICE AND MAINTENANCE

AIRTIGHTNESS OF THE INFLATABLE TUBE

The tube is considered to be airtight if it retains the recommended inflation pressure for 8 hours.

- As the inflatable tube is a primary safety feature - check the airtightness of your boat regularly. Inspect the condition of all inflatable components and remember that some natural release of pressure (see the information below) can occur. Make sure that:
- There are no material cracks, holes and leaks.
- All inflation valves and seams are intact.
- ISO 6185 standard permits up to 20% loss of pressure in any compartment within 24 hours.
- If you discover a significant reduction in pressure add some air using the foot pump supplied.

Never use high-pressure equipment to inflate your boat.

Changes in ambient temperature have a significant influence on air pressure within the tube. A variation of 1°C results in a variation in pressure of about +/- 4 mb (0,06 psi).



- If you discover a significant reduction in pressure, but do not see any obvious sources of leakage:
 - Step 1: check the inflation/deflation valves and overpressure valves.
 - Step 2: check the major seams.
 - Step 3: check the tube material from top to bottom.

Contact your Dealer for advice if necessary.

If you discover any source of leakage it must be properly repaired.



DO NOT OPERATE YOUR BOAT IF YOU ARE AWARE OF AIR LEAKS.



SERVICE AND MAINTENANCE

MAINTENANCE OF STAINLESS STEEL

- We use only top quality stainless steels, which are resistant to corrosion. However, this may not be permanent and maintenance is sometimes required so:
 - Avoid contamination and scoring to the surface.
 - Frequently wash with fresh water.
 - Apply a little marine type grease and mirror polish it regularly.

If you see a sign of rust – clean and mirror polish the area as soon as possible.

WINTERIZING AND STORAGE

- When storing your boat, keep it in a clean and dry place so it is not affected by major temperature fluctuations and other conditions.
- You may store the boat:
 - Assembled and partly inflated with a cover so as to protect it from direct sunlight, dirt, dust and pollution.
- For winterizing:
 - Clean and dry the boat, including seat cushions and any wooden components.
 - Completely drain all water from the hull and bilge compartment.
 - Disconnect and remove the battery.
 - Grease all metal moving parts and connections, including steering.
 - Properly close the fuel system to avoid any vapour leaks.
 - If possible allow air to circulate within the boat, a breathable canvas cover will help.



Winterize the motor, following the manufacturer's instructions.

CAUTION

1. WHEN THE BOAT IS IN STORAGE MAKE SURE IT IS COVERED.
2. STORE THE BOAT AWAY FROM RODENTS.
3. AVOID SHARP FOLDS IN THE TUBE MATERIAL.

REGULAR INSPECTIONS

- Check frequently all navigation lights, horn, VHF radio (if fitted), safety handles, handrails and all other safety related equipment.
- Check frequently the tightness of various screws, bolts and nuts, with particular attention to those holding the engine onto the transom. Also check all steering system components are secure and functioning correctly.
- Regularly examine your fuel system, replace old or damaged components and check the tightness of the fuel line connections.

DANGER

REGULARLY CHECK THE TIGHTNESS OF THE ENGINE TRANSCOM BOLTS AS THEY MAY BE AFFECTED BY VIBRATION.



TRAILERING

7. TRAILERING

Make sure the trailer is set up correctly so that it supports the boat properly. This makes towing safer, and loading and unloading easier. Make certain the boat is properly secured at front and rear of the trailer as incorrect trailering can cause serious traffic accidents and is one of the major causes of boat damage.



Fig. 54. Trailer.

LIFTING THE BOAT

To lift the boat and place it on davits, use the factory fitted lifting eyes only, or have them installed by your Dealer if the boat is not equipped. Use only certified and rated lifting slings, appropriate for your boat and motor weight.



WARNING

1. **MAKE SURE NOBODY IS ON BOARD WHEN LIFTING.**
2. **WHEN LIFTED, THE BOAT SHOULD BE EMPTY (NO REMOVABLE EQUIPMENT) AND IT IS TIPPED SLIGHTLY TOWARD THE REAR WITH COCKPIT DRAIN VALVES OPEN.**



BOAT TOWING

Before towing your boat please refer to the trailer manufacturer's manual and also note the following:

- The size and carrying capacity of the trailer should be suitable for the size and weight of your boat including the engine. Do not use a trailer that is too big or too small for your boat.
- Make sure that the trailer provides adequate support for the keel and bunks that provide large contact areas for the hull.
- The boat is properly inflated and the cockpit and hull drain plugs are open.
- Haul the boat onto the trailer using the bow eye.
- Make sure that the outboard engine leg is in the "trailer position". Refer to manufacturer's manual.
- Secure the boat to the trailer with suitable straps or rope, using bow, lateral and rear eyes for this purpose.
- Close and secure all hatches and openings on the boat. Cushions must be placed in lockers or removed to prevent loss during transit.

Do not trailer the boat with the overall cover in place, it is not designed for transportation.



8. SHOW RESPECT FOR THE ENVIRONMENT

REMEMBER THAT RESPONSIBLE BOATING BEGINS WITH YOU!

Respect your environment by applying the following basic rules:

- **AVOID CREATING EXCESSIVE WASH.**
- **KEEP OUT OF DESIGNATED SWIMMING AREAS.**
- **RESPECT ALL ANIMAL LIFE.**
- **BE CAREFUL NOT TO OVERFILL THE FUEL TANK.**
- **DON'T MAKE UNNECESSARY NOISE.**
- **DO NOT DISCHARGE OIL OR FUELS INTO THE WATER.**
- **DO NOT LITTER.**

The health of our environment depends on us all acting responsibly to ensure a clean tomorrow. If each of us follows these few simple rules, we can help to keep the Earth's resources intact for future generations.



9. GRAND'S WARRANTY

GENERAL

Subject to the terms and conditions detailed below, Grand Marine Corporation warrants that Grand Inflatable Boats are free from defects in material or workmanship for the defined warranty period, and will, at its option, repair or replace defective parts on return of the craft to the premises of an Authorised Grand Reseller.

This warranty applies to new Grand Inflatable Boats purchased from an Authorised Grand Marine Reseller.

By using the Grand Inflatable Boats, the owner and operator understands and agree to undertake all instructions in the Grand Owner's Manual, and agrees to all warranty and liability terms and conditions contained in this warranty.

WARRANTY PERIOD

Grand warrants Grand branded components from the date of purchase for a period of:

- 24 consecutive months for normal personal recreational use*.

* - Normal recreational use is defined as not more than 100 annual return trips with not more than 100 annual outboard hours. Greater annual usage than this is not covered by the Grand recreational warranty.



WARRANTY

WARRANTY COVERAGE

The Grand warranty covers the following:

- Grand hull and its appropriated hull components.
- Inflatable tubes.

This warranty is limited to repair, or at Grand option, replacement of parts suffering from any of the defects described above during the warranty period. The judgment of Grand is final concerning the extent of items covered under above warranty.

The outboard engine, electrical and electronic components, other auxiliaries are subject of the warranty of the appropriate Manufacturer.



WARRANTY EXCLUSIONS

Grand warranty does not cover the following:

- Replacement of parts due to normal wear and tear.
- Routine maintenance parts and services, including but not limited to, maintenance requirements, oil and lubrication, replacement of fuses or bulbs, linkage adjustments, filters and spark plugs, tyres, and other consumable items.
- Damage caused by not following procedures and recommendations in the Grand Owner's Manual.
- Operating the craft beyond the design category.
- Damage caused by improper or lack of maintenance, winterization or storage.
- Damage caused by abuse, impact, accident, misuse, abnormal use or strain, neglect, racing, improper operation or operation not in accordance with the recommended procedures described in the Grand Owner's Manual.
- Damage or cosmetic changes due to exposure to the atmospheric or environmental conditions, including mould or marine organisms, or outside galvanic activity.

Damage resulting from tearing, punctures, abrasions, abuse, external damage, accident, submersion, water ingestion or contamination, fire, theft.



WARRANTY

WARRANTY CERTIFICATE

Name of Customer: _____

Address: _____

City: _____ Post code: _____

E-mail _____ Phone number: _____

WIN (Serial number): _____

Signature: _____

Dealer address: _____

City: _____ Post code: _____

Date of purchase: _____

Seller and customer acknowledge by signing that seller handed and customer received hereinbefore boat including standard (optional, if relevant) equipment and manual in English and that the boat is without evident defects.

SELLER SIGNATURE:

CUSTOMER SIGNATURE:

FOR YOUR NOTES

GRAND

INFLATABLE BOATS

Potemkina str. 18a, Solonicevka 62370,
Dergachevsky distr., Kharkovskaya obl.,
UKRAINE

Tel: +380 57 7840125

Tel/fax: +380 57 7840124

www.grandboats.com

mail@grandmarine.com.ua



Scan & visit
our official
website &
social media