



PRO

PRO 850

Tome 2 – Volume 2

Teil 2 – Tomo 2

7R20230

Edition 4



LIRE ATTENTIVEMENT CE MANUEL AVANT LA MISE EN SERVICE DE VOTRE ZODIAC.
CAREFULLY READ THIS MANUAL BEFORE OPERATING YOUR ZODIAC.
LEGGERE ATTENTAMENTE PRIMA DE INIZIARE IL MONTAGGIO DEL VOSTRO ZODIAC.
VOR INBETRIEBNAHME IHRES ZODIAC VORLIEGENDES HANDBUCH AUFMERKSAM LESEN.
LEER CUIDADOSAMENTE ESTE MANUAL ANTES DE PONER EN SERVICIO SU ZODIAC.



**Owner's Manual
Volume 2**

PRO 850

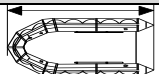


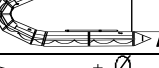

**VOLUME 2
DESCRIPTION – BUOYANCY MECHANISM
PROPULSION SYSTEM
INSTALLATION AND CIRCUITS**


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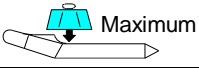
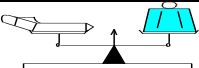
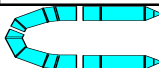
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



DESCRIPTION - Technical Characteristics

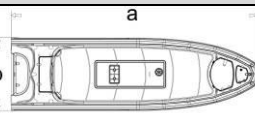
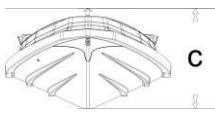
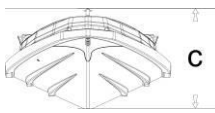
I-1-TECHNICAL CHARACTERISTICS

Dimensions		
	(m)	8.5
	(ft)	27'10"
	(m)	7.45
	(ft)	24'5"
	(m)	3
	(ft)	9'10"
	(m)	1.85
	(ft)	6'
	(m)	0.6
	(ft)	1'11"

Design category	
 (Directive 94/25/CE)	B / C

Capacity			
 (ISO)		B=10	C=20
	Kg ⁽¹⁾	2050	2800
	lb. ⁽¹⁾	4519	6173
	Kg ⁽²⁾	1350	1350
	lb. ⁽²⁾	2976	2976
 Compartment		7	

Motorisation				
Shaft length			SINGLE ENGINE	TWIN ENGINE
			XXL	XL
	Minimum power recommended	HP ⁽³⁾	250	2 x 175
		kW ⁽³⁾	187	2 x 131
	Maximum power recommended	CV	300	2 x 225
		kW	225	2 x 166
	Maximum power authorised	HP ⁽³⁾	300	2 x 225
		kW ⁽³⁾	225	2 x 166
	Maximum engine weight	kg	393	2 x 272
		lbs	866	2 x 600

Hull dimensions (excluding options)		
	a ⁽⁴⁾ (m)	7,78
	(ft)	25'6"
	b ⁽⁴⁾ (m)	2,27
	(ft)	7'5"
	c ⁽⁴⁾ (m)	1,37
	(ft)	4'5"

DESCRIPTION - Technical Characteristics

Category conception : Your boat has been built for B & C category. It means different layouts/ passengers and payload capacity for each category.

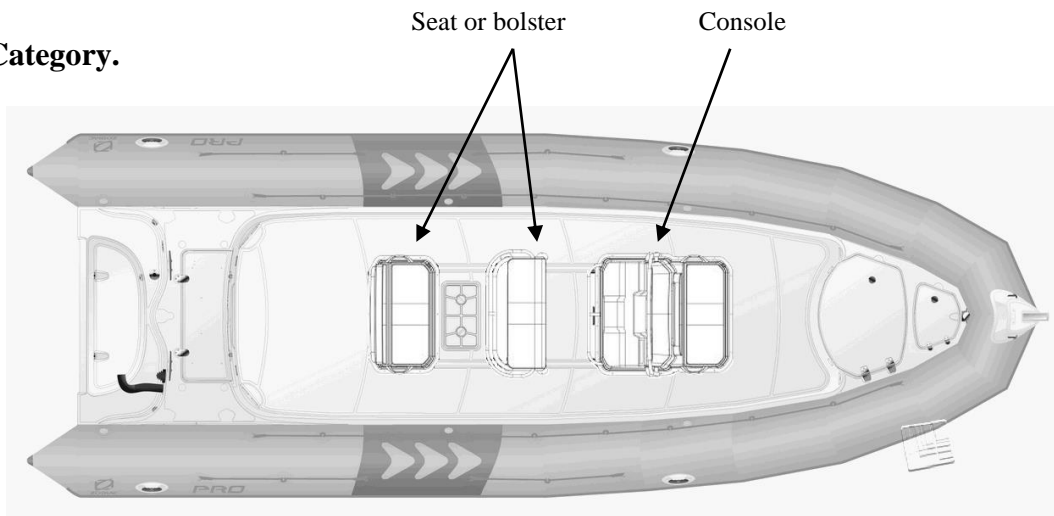
The B category allows to navigate with 10 passengers. Each passenger has to be seated and have possibility to hold on to the boat.

We recommend you to use the specific Zodiac accessories (contact your dealer).

Position of accessories SEAT / BOLSTER (per design category)

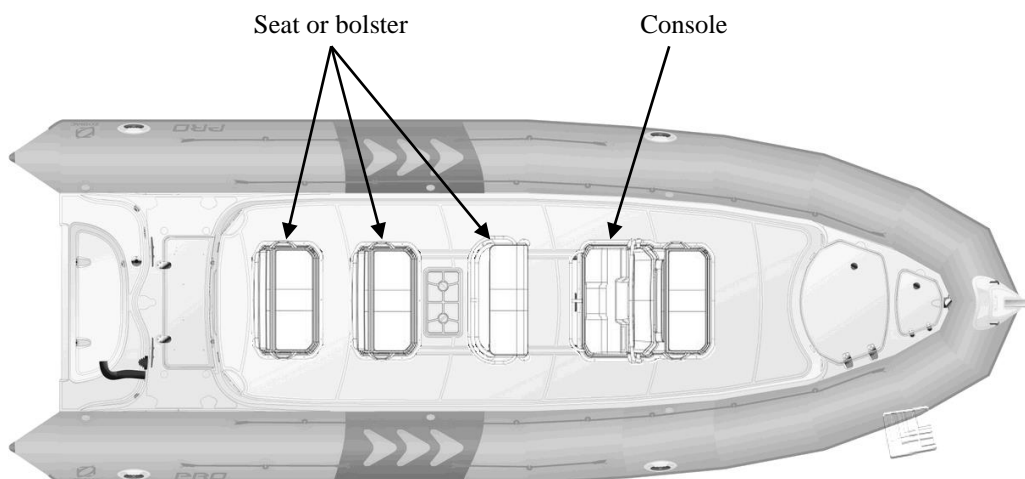
Depending on the navigation category in which the boat is used, the diagram below shows 2 positions for the seat or bolster depending on the number of seats required.

-C Category.




- B Category.


- The number of persons in category B is limited to 10, all seated.



NOTE	Dimension tolerances: +/- 4% Weight tolerances: +/- 5%
-------------	---

NOTE	<p>⁽¹⁾ The maximum authorized load was calculated to standard ISO 6185. Navigate carefully when the boat carries the maximum load.</p> <p>⁽²⁾ Weight shown not including accessories</p> <p>⁽³⁾ The recommended power corresponds to optimum operation of the boat's capabilities for an average load.</p> <p>⁽⁴⁾ Hull dimensions without buoyancy mechanism.</p> <p>Use the maximum authorised power with extreme prudence (see Volume 1 of the manual "Navigation advice")</p>
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 CAUTION	<p>DO NOT EXCEED THE MAXIMUM LOAD ON THE MANUFACTURER'S PLATE. THE MAXIMUM LOAD INCLUDES THE WEIGHT OF THE ENGINE(S), FUEL, ACCESSORIES, PASSENGERS AND THEIR EQUIPMENT AND ANY OTHER TYPE OF LOAD.</p>
---	--

 CAUTION	<p>DO NOT STORE FLAMMABLE PRODUCTS IN THE AFT COMPARTMENT. IT IS STRICTLY FORBIDDEN TO STORE A JERRYCAN.</p>
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TUBE - Cleaning

This boat's tube is made with Hypalon™ Néoprène™ 1670 dtex fabric.

For a better maintenance we recommend to clean the tube with soapy water or ecological cleaner like Revival, available in your Zodiac dealer shop.

 ATTENTION	<p>DO NOT USE CLEANER WITH SOLVENT LIKE ACETATE</p>
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TECHNICAL DESCRIPTION

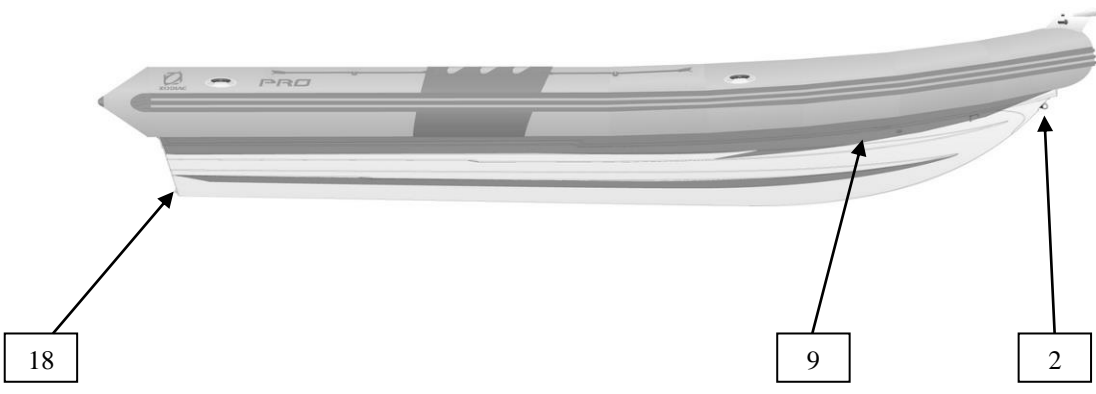
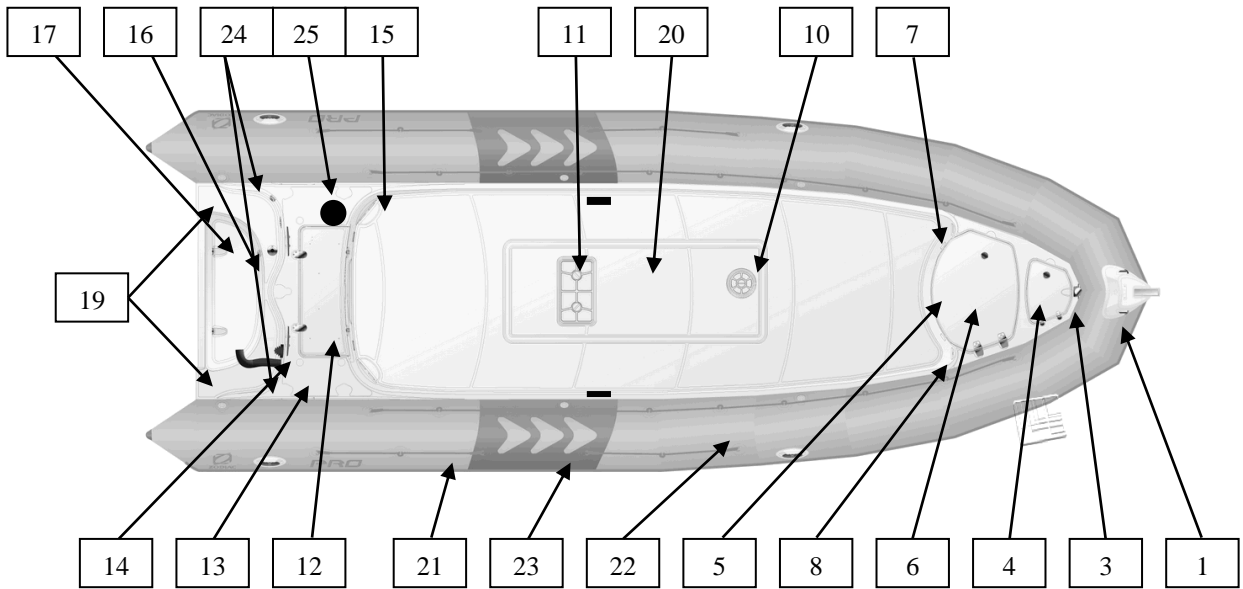
I -2-INVENTORY

HULL
• Polyester hull
• Counter-moulded non-slip deck
• 1 bow ring
• 1 anchoring rope locker
• 1 sheave-hole
• 1 mooring cleat + 2 rear cleats
• 1 forward chest + removable chest (75 litres)
• 1 rear chest
• 2 tension chain plates
• 1 hull plug hole
• 4 quick drain holes
• 1 400-litre tank
• 1 fuel/water separator filter
• 1 fuel circuit valve/ gauge circuit essence access hatch
• 1 fuel pipes connection access hatch
• Electrical circuit with battery couplers and circuit breaker.
• 2 bilge pumps
BUOYANCY MECHANISM
• Removable buoyancy mechanism made of STRONGAN DUOTEX 2 X 1100 Decitex fabric
• 7 Semi built-in valves “easy-push”
• Anti-chafing band with ultra-wide profile
• 4 external handles
• 2 patches
• lashing
• Short cones
• 1 davit + rea + cleat + lights
STANDARD EQUIPMENT
• 2 paddles
• Foot inflation pump
• Manometer
• Repair kit
OPTIONAL ACCESSORIES*
• Console
• Seat
• Bolster
• Rear seatback
• Ski pylon
• Roll bar
• T-top
• Bathing ladder
• 4- and 6-cylinder racks
• Electrical inflator.

* For more information on available optional accessories see your ZODIAC dealer.

DESCRIPTION - Functional Elements

I-3-LOCATION OF ELEMENTS



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DESCRIPTION - Functional Elements

MARK	DESIGNATION
1	1 davit + rea + cleat + lights
2	Bow ring
3	mooring cleat
4	Anchoring rope locker cover
5	Fuel filling point
6	Removable 75-litre chest
7	Tank compartment ventilation grid
8	Tank vent
9	Fuel overflow drainage
10	Tank hose access hatch.
11	Tank valve/gauge access hatch.
12	Rear cover
13	Fuel/water separator filter
14	Engine cable feedthrough
15	Quick drain hole
16	Rear trough
17	Trough outlets
18	Hull plug hole
19	Rear chain plates
20	Tank
21	Buoyancy mechanism
22	Lashing
23	Pro logos
24	Rear cleat
25	White light slot

DESCRIPTION - Handling

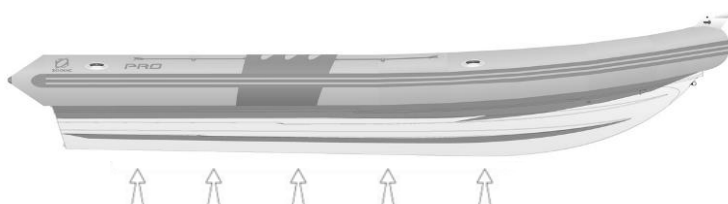
I-4-HANDLING

I-4-1-Transport:


- Advice for fitting to a trailer is given in the owner's manual, Volume 1.

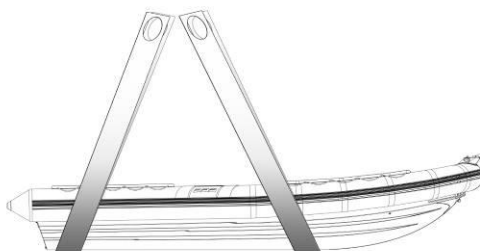
I-4-2-Storage:



 CAUTION	THE BOAT MUST REST ON THE BOW (SEE SKETCH BELOW)
---	---



I-4-3-Lifting: The boat has no lifting devices.

 WARNING	THE BOAT HAS NO LIFTING DEVICE SO HOISTING REQUIRES PASSING SUITABLE LIFTING STRAPS UNDER THE HULL. FOR THIS OPERATION USE PROFESSIONAL LIFTERS.
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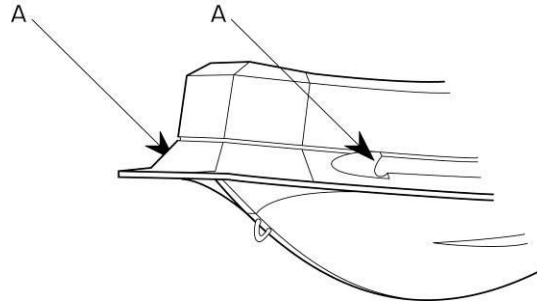


 ATTENTION	NO PASSENGERS ON BOARD WHILE LIFTING
 WARNING	ALL EQUIPMENT MUST BE UNLOADED FROM THE BOAT FOR LIFTING. BEFORE LAUNCHING THE BOAT, OPEN THE PLUG HOLE (18) TO DRAIN ANY RAINWATER FROM THE COCKPIT (CLOSE THE PLUG HOLE AGAIN BEFORE LAUNCHING).

BUOYANCY MECHANISM – Assembly on the Hull

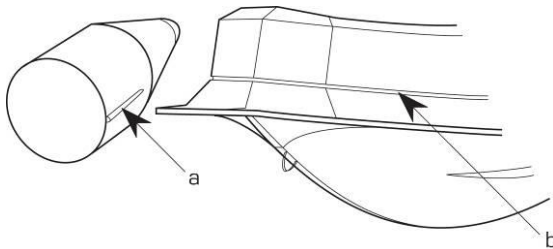
II-1-ASSEMBLING THE BUOYANCY MECHANISM ON THE HULL

1



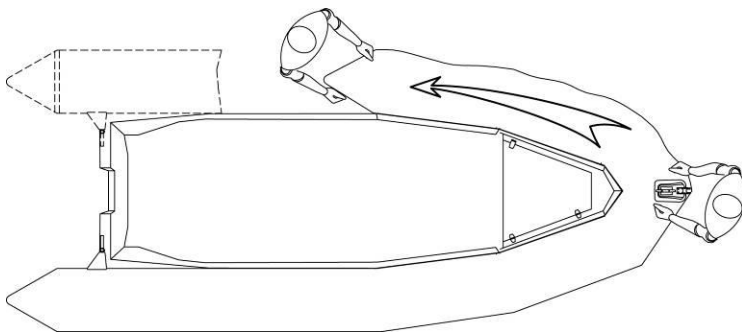
To facilitate the positioning of the buoyancy mechanism, apply liquid soap (A) to the hull rails

2



Place the bolt rope (a) of the buoyancy mechanism in the hull rail (b) located in the bow of the hull. Pull on the buoyancy mechanism until the mini-bolt rope faces the rail.

3



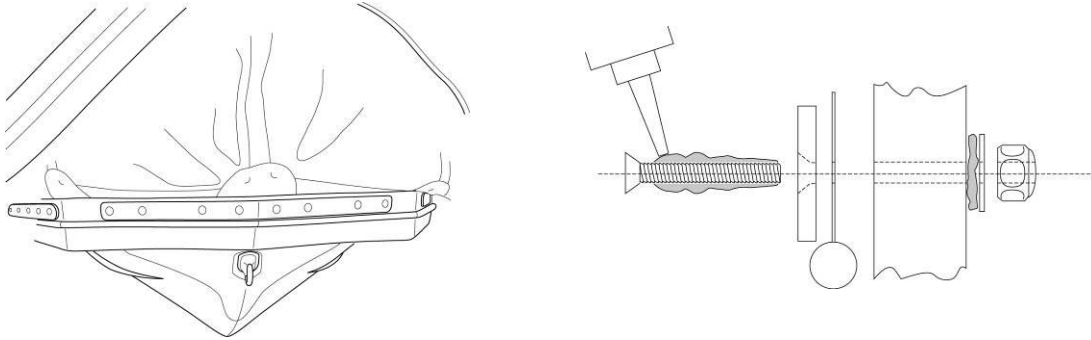
- Proceed in the same way for the other side of the buoyancy mechanism.
- Move the tip of the buoyancy mechanism forwards to fold the outer flap down under the tip of the hull.
- Pull the 2 tabs of the buoyancy mechanism again as far as possible towards the aft end of the boat, and try to centre the tip with the bow of the hull.
- Slightly inflate the tip of the buoyancy mechanism to check that it has been well centred and that it matches the hull perfectly. Begin the operation again if the buoyancy mechanism is not correctly positioned.

BUOYANCY MECHANISM - Fixing the Flap

II-2-FIXING THE FLAP

4

Fix the external flap using the stainless steel bars and bolts of the buoyancy mechanism kit. Apply sealing compound on all the screws and in the hull holes to achieve final tightness.



NOTE:

The buoyancy mechanism is mounted on the hull deflated.



You may inflate the buoyancy mechanism disassembled (pressure 240 mb) and let it stabilize for approximately one hour. Then deflate it.

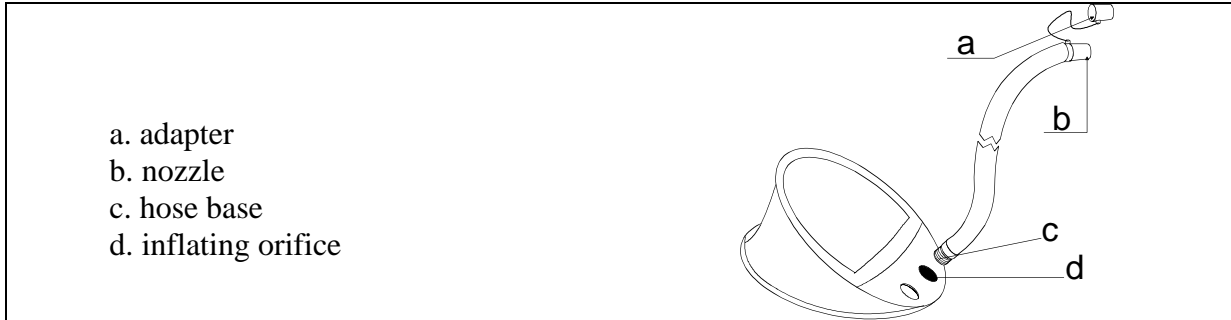


If the buoyancy mechanism was stored at a temperature lower than 0 °C, leave it 12 hours at room temperature (20 °C) before folding it.

BUOYANCY MECHANISM - Inflating System

II-3-INFLATING SYSTEM

II -3-1- The inflation pump



- a. adapter
- b. nozzle
- c. hose base
- d. inflating orifice

* A fast electrical inflator (12 V) is available as an option (contact your dealer).

II -3-2- Valves

EASY PUSH VALVES

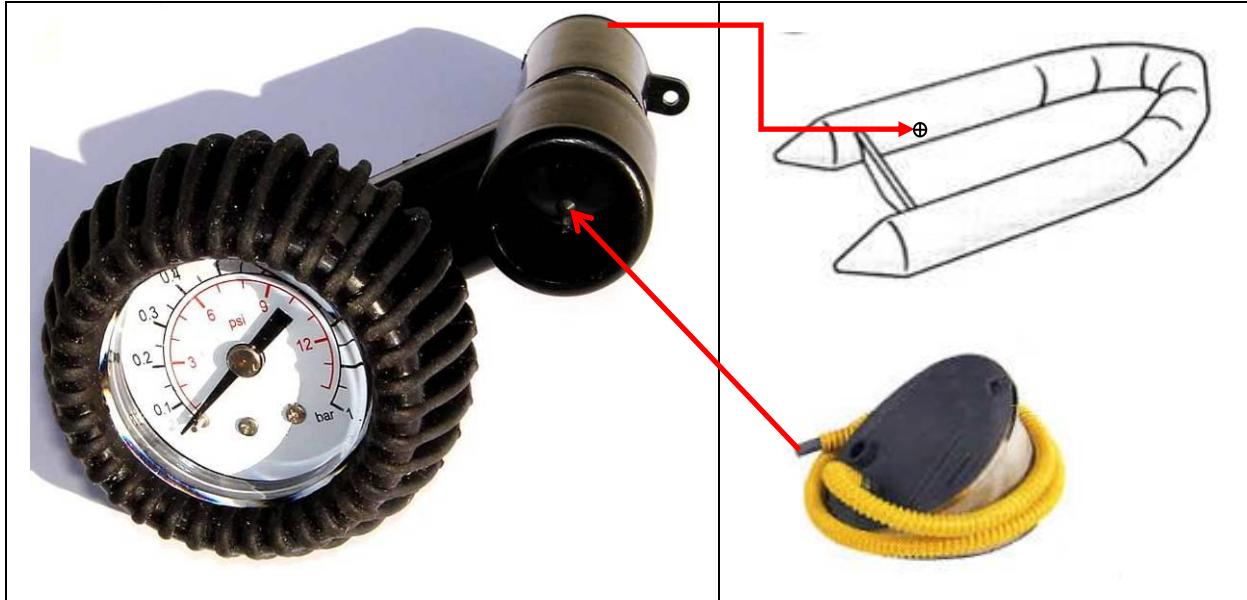
To change position	In inflating position	In deflating position
<p>Push</p>		
	The membrane is closed, the knob is up	The membrane is open, the knob is down

NOTE:

ALWAYS REFIT THE VALVE PLUG AFTER INFLATING OR DEFLATING

BUOYANCY MECHANISM - Inflating System

II -3-3- Pressure gauge



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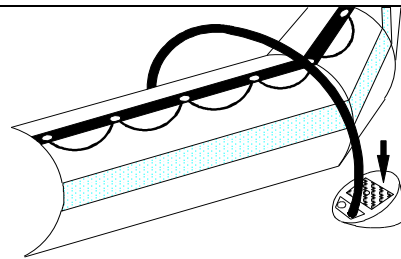
II -3-4- Buoyancy mechanism inflation

Activate all valves in inflating position

Fix the hose base in the inflator inflating orifice

To inflate your boat properly, the inflator should be correctly placed on the ground.

The boat inflates rapidly if the inflator is used smoothly and without haste.




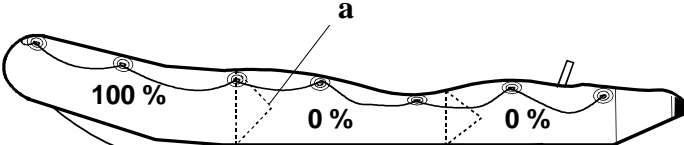
DO NOT USE A COMPRESSOR OR COMPRESSED AIR CYLINDER


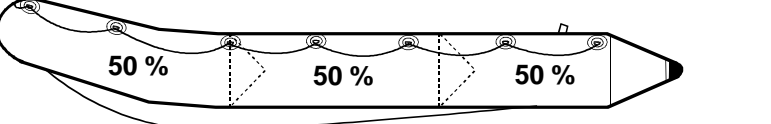
BUOYANCY MECHANISM - Pressure


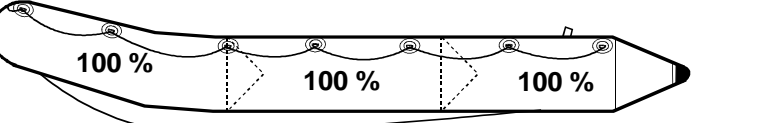
II -4-1- Buoyancy mechanism inflation

- Place the adapter corresponding to the diameter of the semi built-in valve at the inflator hose nozzle.

Inflate the buoyancy mechanism, **balancing the pressure between the different compartments until the partitions (a) are no longer visible (pressure = 240 mb)**

	<p>Never pressurise a compartment when the others are completely deflated</p>	
---	---	--

	<p>1</p>	
---	----------	--

	<p>2</p>	
--	----------	---

Inflating is complete: Screw on the inflating valve caps

<p>NOTE:</p>	<p>A slight air leak is normal before the valve cap is screwed on Only the caps guarantee final air tightness</p>
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II-4-2- Pressure

Operating pressure for the buoyancy mechanism is 240 mb/ 3.4 PSI (middle of the green zone of the pressure gauge).

Your boat is equipped with an *ACCESS* pressure indicator that will enable you to read the pressure quickly and efficiently during inflating (see explanations for use in the section Inflating System).

<p>The ambient temperature of the air or water proportionately influences the level of internal pressure in the buoyancy mechanism</p>	<p>Ambient Temperature</p>	<p>Internal buoyancy mechanism pressure</p>
	<p>+1°C</p>	<p>+4 mb / 0.06 PSI</p>
	<p>-1°C</p>	<p>-4 mb / 0.06 PSI</p>

BUOYANCY MECHANISM - Pressure

Thus, it is important to anticipate:

Check and adjust the pressure in the inflatable compartments (re-inflating or deflating as necessary) according to temperature variations (especially when the temperature varies greatly between the morning and evening in hot climates) and ensure that the pressure is within the recommended pressure zone (from 220 to 270 mb/green zone).

RISK OF UNDERPRESSURE:

EXAMPLE: Your boat is exposed on a beach in the sun (temperature=50 °C) at the recommended pressure (240 mb/3.4 PSI). When you launch it (temperature=20 °C), the temperature and internal pressure of the inflatable compartments will drop simultaneously (up to 120 mb) and **YOU WILL THEN NEED TO REFLATE** until you regain the millibars lost due to the difference between the ambient air and water temperatures. A drop in pressure at the end of the day, when the outside temperature is dropping, is normal.

RISK OF OVERPRESSURE

EXAMPLE: Your boat is inflated to its recommended pressure (240 mb/3.4 PSI) at the beginning or end of the day (low outside temperature = 10 °C). Later in the day, your boat is exposed in the sun on the beach or on a yacht deck (temperature = 50 °C). The temperature inside the inflatable compartments may rise to 70 °C (particularly for dark buoyancy mechanisms), doubling the initial pressure (480 mb). **YOU WILL THEN NEED TO DEFLATE** the boat to return to the recommended pressure.

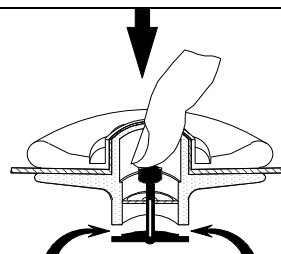


CAUTION

IF YOUR BOAT IS OVERINFLATED, THERE WILL BE UNDUE PRESSURE ON THE INFLATABLE STRUCTURE THAT MAY RUPTURE IT.

IN CASE OF OVERPRESSURE

“EASY-PUSH” VALVE
Release some air by pressing the valve knob.



PROPULSION SYSTEM

Comply with ZODIAC recommendations and engine constructor recommendations regarding engine assembly.

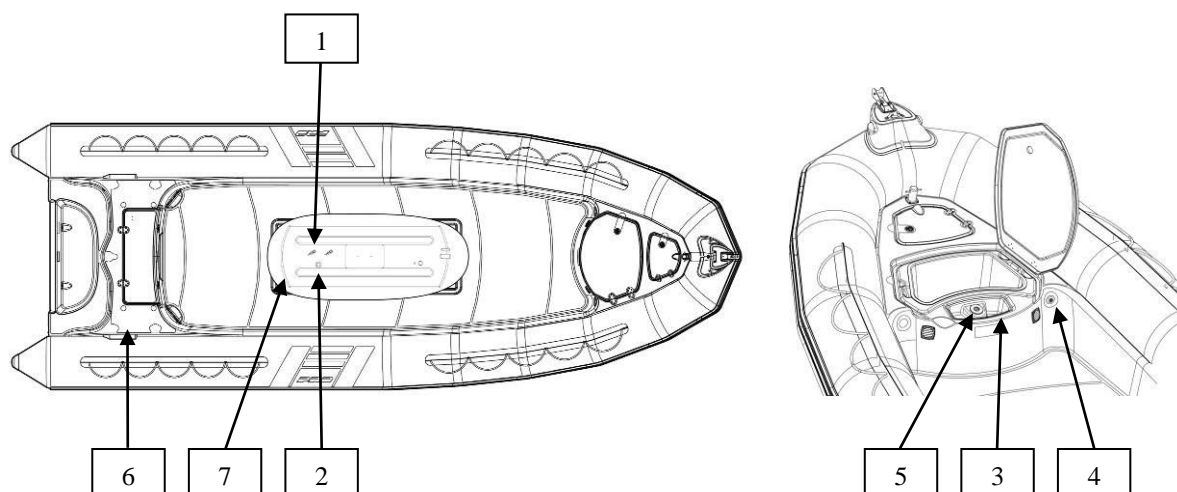
For optimum use of your boat, see your dealer.

INSTALLATION AND CIRCUIT - Fuel


IV-1-FUEL

IV -1-1-Description of essential functional parts:

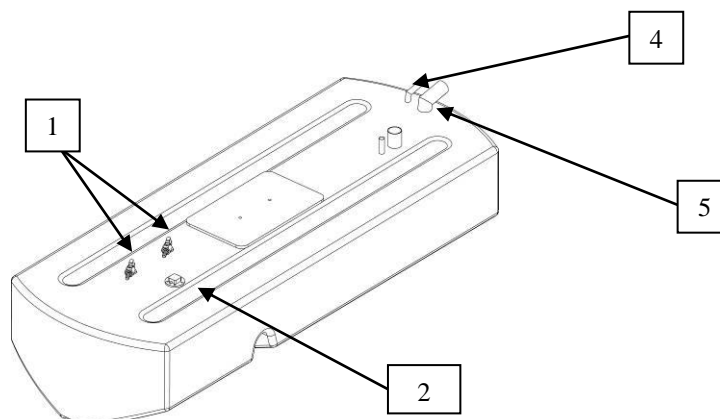
The boat is factory-mounted with a 400-litre tank located under the deck. It is filled at the prow, via a filling port below the front hood.



MARK	DESIGNATION
1	Fuel circuit closing valve
2	Gauge transmitter
3	Draining hole of the overflow compartment
4	Vent
5	Filling hole
6	Fuel/water separator filter (supplied for single-engine configuration)
7	Fuel tank

 WARNING	<p><input checked="" type="checkbox"/> IN SINGLE-ENGINE CONFIGURATION, REMEMBER TO CLOSE THE FUEL VALVE OF THE SECOND ENGINE.</p>
---	--

IV -2-1-Tank



INSTALLATION AND CIRCUIT - Fuel

IV-1-3- Water/Fuel separator filter

NOTE:	To protect the engine, a water/fuel separator filter is placed on the fuel supply circuit.
--------------	---

The water/fuel separator filter is located in the aft chest, on the starboard partition (contact your dealer to obtain a second filter for dual-engine configurations).



MARK	DESIGNATION
1	Filter head, fixed to the boat
2	Interchangeable filtering element

 WARNING	THE CARTRIDGE MUST BE CHANGED EVERY 50 HOURS USE
---	---

INSTALLATION AND CIRCUIT - Fuel

Changing the filter cartridge:

Comply with Zodiac recommendations and filter manufacturer recommendations

Place a funnel and recovery bowl underneath the cartridge while it is being replaced. Before changing the filter, make sure the fuel supply line pressure is released. Please refer to the engine manufacturer's owner manual instructions.

Gasoline is a highly flammable product. **TURN THE ENGINE OFF**, disconnect the battery, do not smoke and keep all naked flames well away while you proceed with the kit installation. Place a funnel and bowl pan underneath the cartridge while it is being replaced.

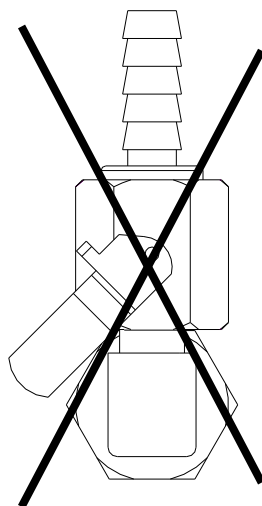
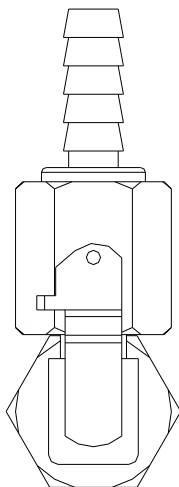
Before changing the filter, make sure the fuel supply line pressure is released.



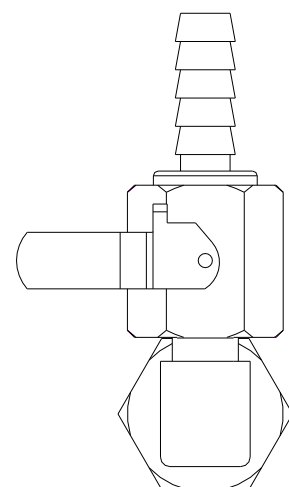
IV-1-4-Using the fuel circuit cut-off valves:

NOTE:	<ul style="list-style-type: none">- When you are no longer using your boat, close the fuel circuit valve- When you are going to use your boat, open the fuel circuit valve
--------------	---

Fuel circuit valve
Open position







Fuel circuit valve
Closed position



INSTALLATION AND CIRCUIT - Fuel

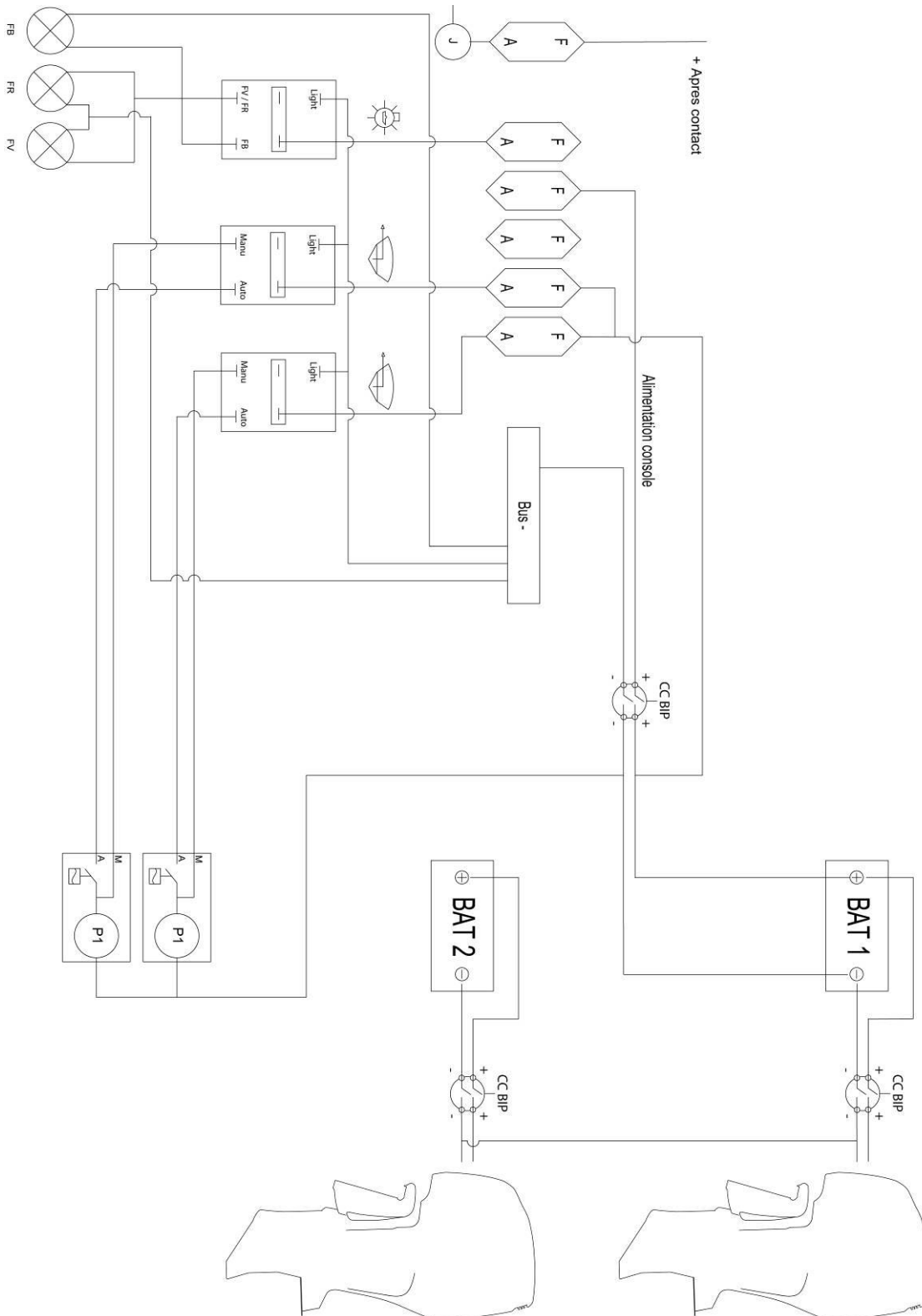
IV-1-5-Recommendations:

 WARNING	<p>IN CASE OF FUEL LEAK OR FIRE, THE FUEL CIRCUIT CLOSING VALVE, LOCATED ON THE TANK, ISOLATES THE TANK FROM THE FUEL CIRCUIT AND MUST REMAIN CLOSED.</p>
 WARNING	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> A FULL TANK AVOIDS CONDENSATION ON EACH OPERATION. <input checked="" type="checkbox"/> CLEAN THE TANK EVERY FIVE YEARS. <input checked="" type="checkbox"/> CHECK THAT THE CLAMPS ON ALL HOSES ARE CORRECTLY TIGHTENED. <input checked="" type="checkbox"/> WHEN PURGING THE FILTER, DO NOT DUMP THE WATER IN THE BOAT. USE A RECOVERY TRAY BELOW THE FILTER. <input checked="" type="checkbox"/> CUT THE POWER SUPPLY BEFORE DISMANTLING THE FILTER CARTRIDGE <input checked="" type="checkbox"/> READ THE INSTRUCTIONS ON THE FILTER MANUAL ATTENTIVELY.
 WARNING	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> FUEL IS EXTREMELY FLAMMABLE. WHEN WORKING ON THE FUEL SYSTEM, MAKE SURE THE ENGINE IS CUT OFF. <p>DO NOT SMOKE; KEEP FLAMES AND INCANDESCENT OBJECTS AWAY FROM THE WORKING AREA.</p>
 WARNING	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> NEVER DRILL THE TANK AREA WITH A BIT PROTRUDING MORE THAN 30 MM FROM THE DRILL HEAD (MARK ON THE DECK BY A HATCH) AND DO NOT USE SCREWS OVER 20 MM LONG.

INSTALLATION AND CIRCUIT - Electricity

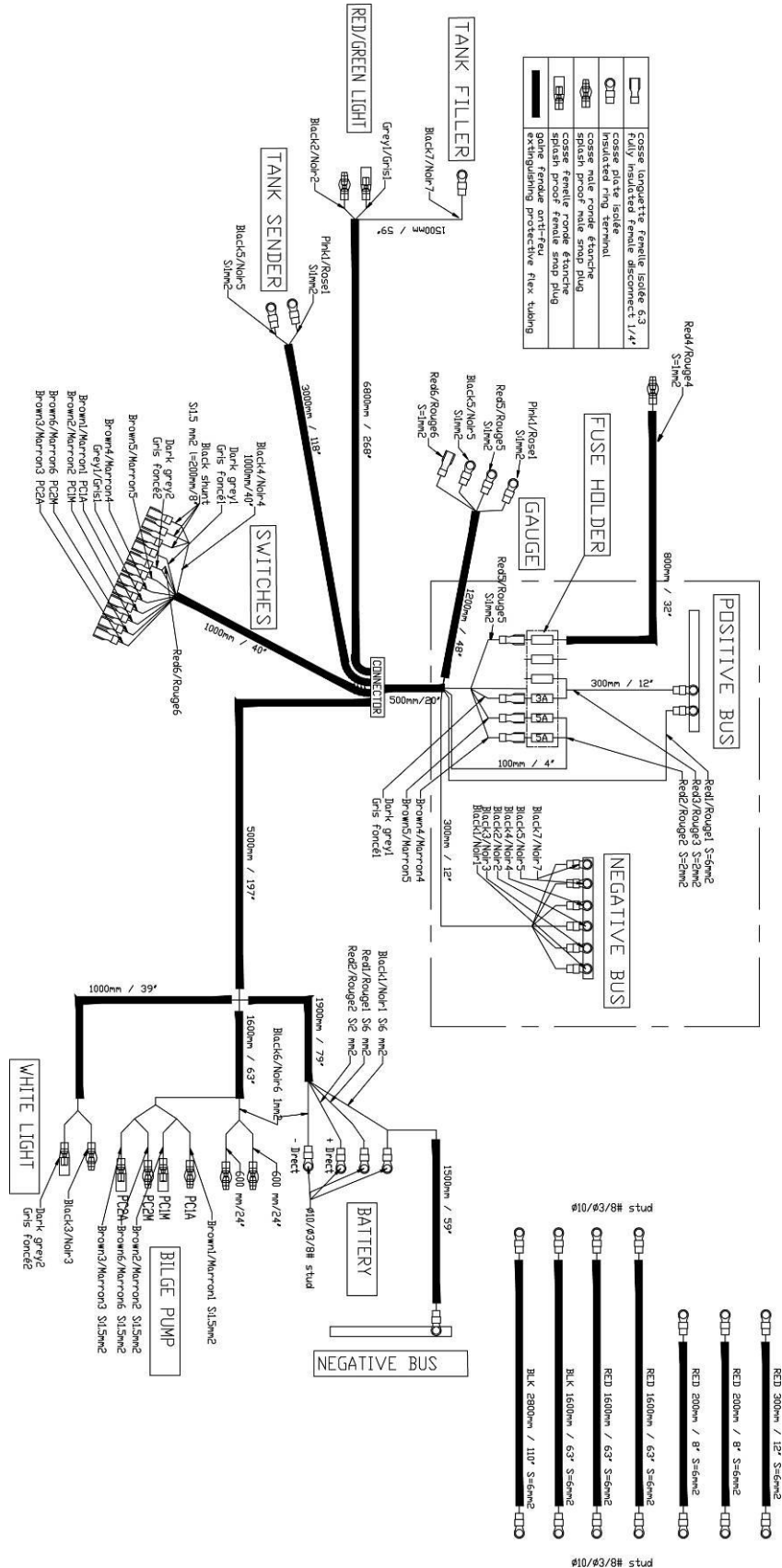
IV -2-ELECTRICITY

IV -2-1-Schematic diagram (an A3 drawing is supplied with the console connection unit).



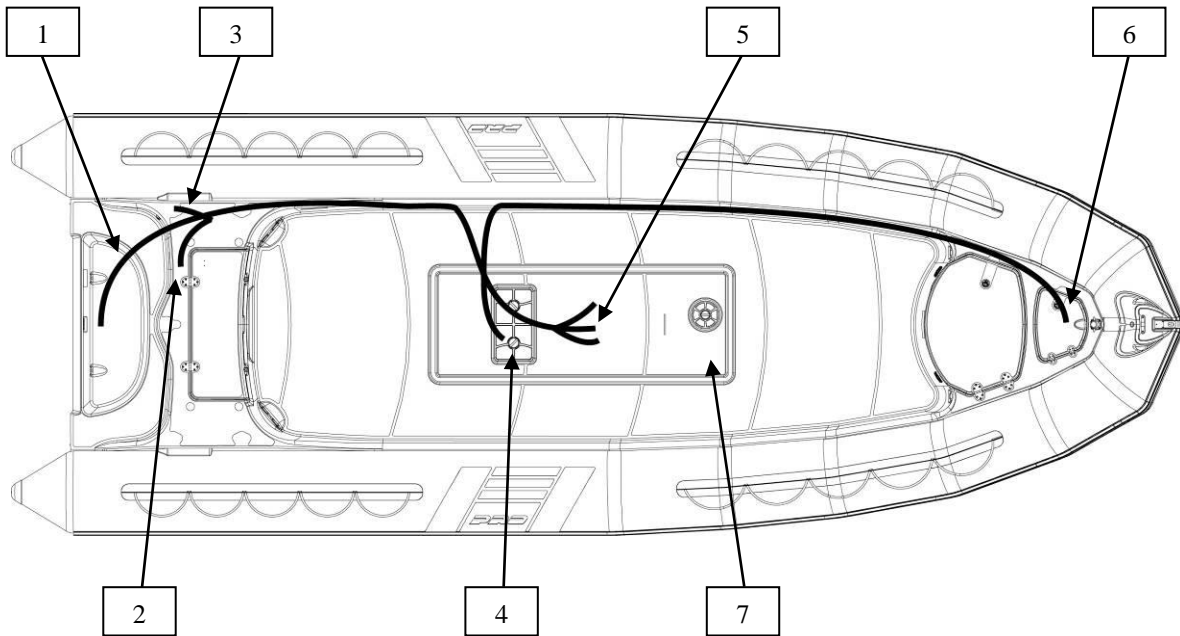
INSTALLATION AND CIRCUIT - Electricity

IV-2-2 - Harness drawings (an A3 drawing is supplied with the console connection unit).



INSTALLATION AND CIRCUIT - Electricity

IV-2-3 Item location



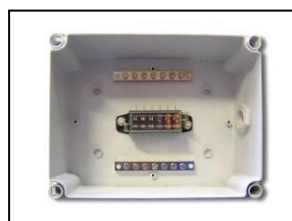
Correspondence:

ITEM No.	DESIGNATION
1	Bilge pump switch
2	Coupler support and battery isolation switch
3	Standby power supply for white light
4	Reservoir gauge
5	Standby cable below the hatch for wiring to the console
6	Davit light power supply
7	Feedthrough position

IV-2-4- Wiring the console unit and switch

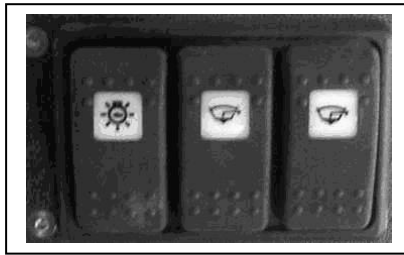
Your boat has been prewired with an electrical harness; only some items remain to be connected to the console (the rest of the harness to connect to the console is below the bridge mark 5)

- 1 Box: distributor (bus bar + fuse holder)



INSTALLATION AND CIRCUIT - Electricity

- The light + bilge pump switches (also supplied).

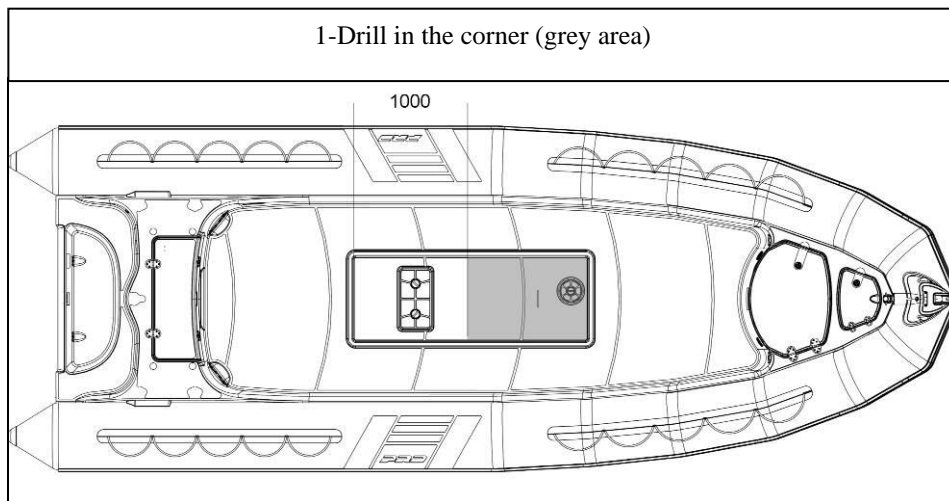


- The fuel gauge holder.

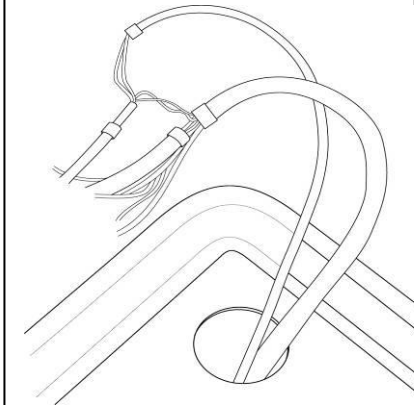
IV-2-5 Wiring preparation

IV-2-5-1 Installing the feedthrough (supplied)

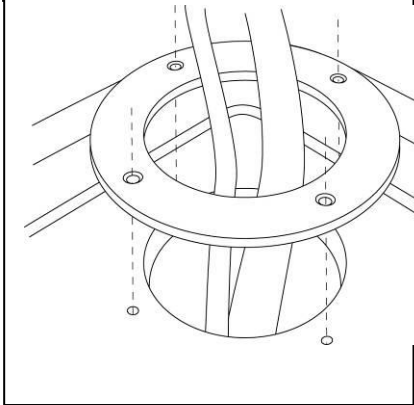
<p>WARNING</p>	<p>WHEN DRILLING, BE CAREFUL WITH THE TANK LOCATED JUST UNDERNEATH.</p>
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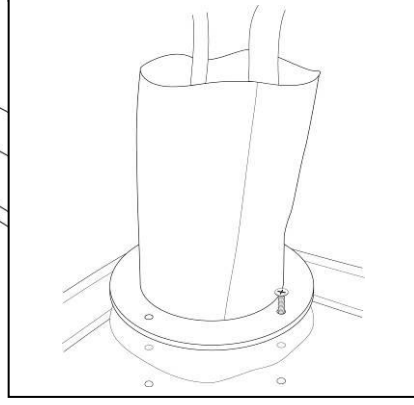
2- Find the electrical cables of the prewired harness. Mark 5



3- Present the clamp to pre-drill the deck, then drill.



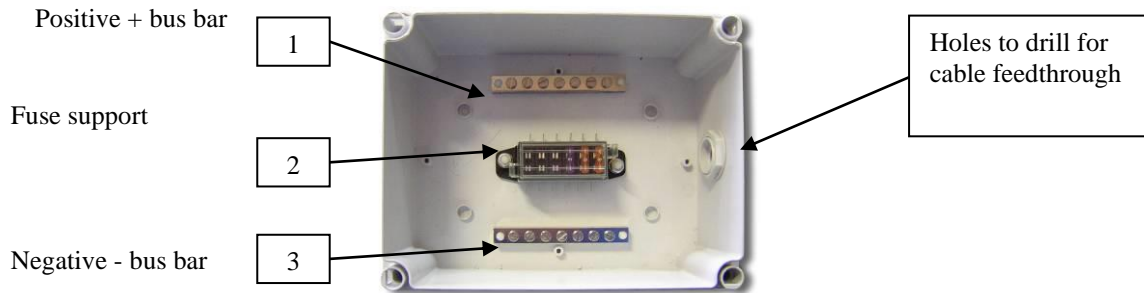
4 -Thread the feedthrough, the clamp and then attach everything to the deck. (Seal the screws and underside of the feedthrough)



INSTALLATION AND CIRCUIT - Electricity

IV-2-5-2 Unit wiring

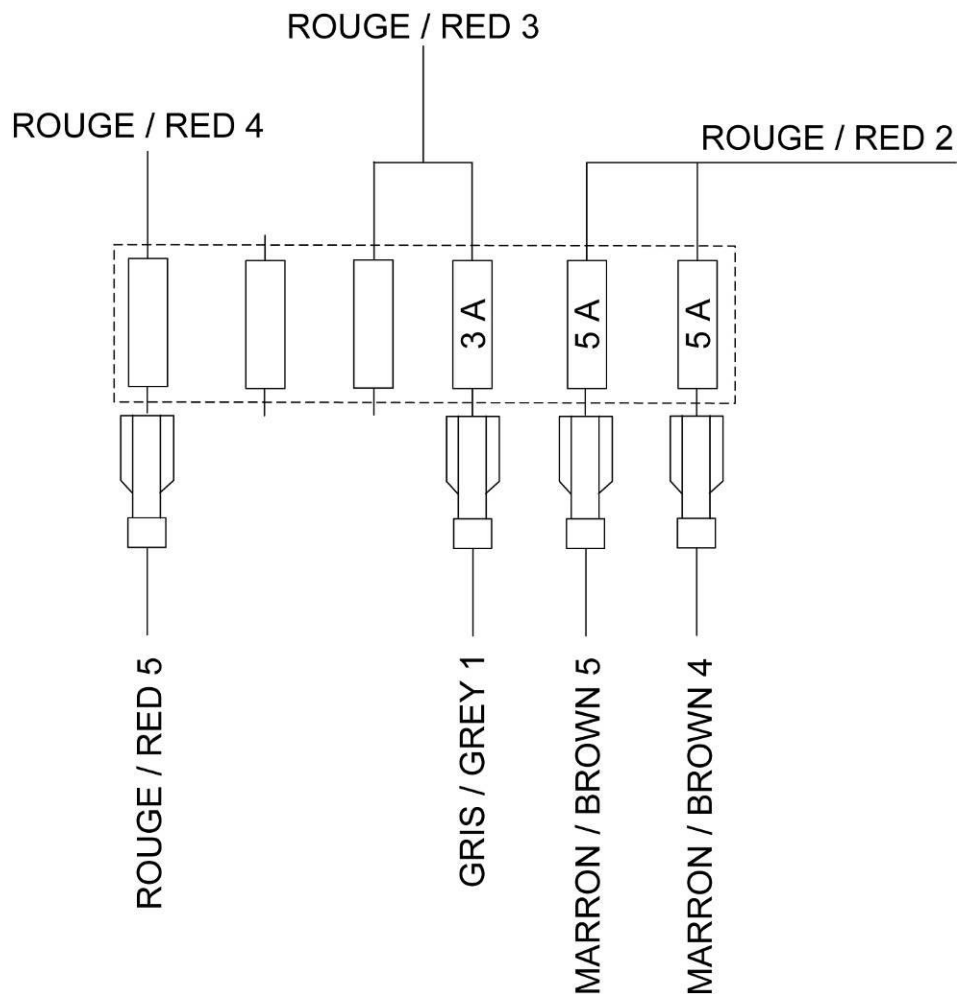
After positioning the console on the deck and passing the cables through the console shelf (for console Z61128), wire the unit.



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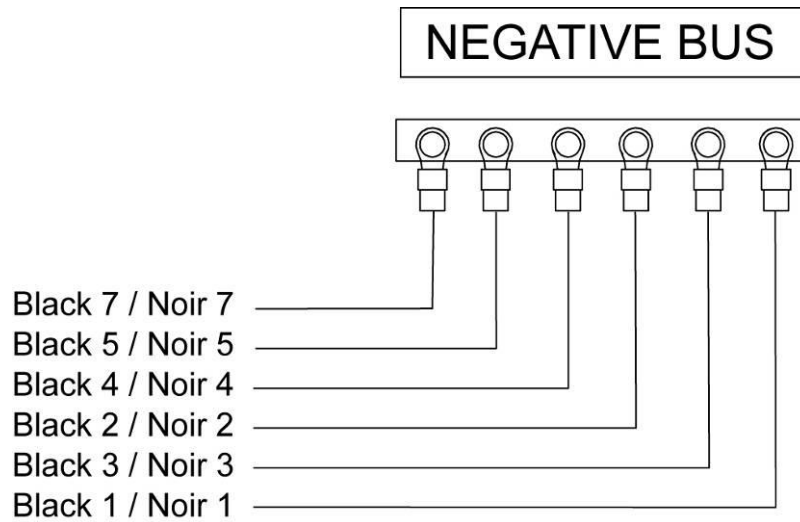
IV-2-5-3 Wiring

- Step 1: Connect the following cables on the fuse support bus (mark 2).



INSTALLATION AND CIRCUIT - Electricity

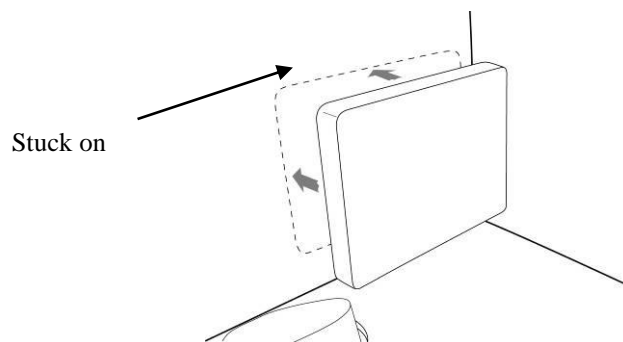
- Step 2: Connect the following cables on the negative bus bar (mark 3).



- Step 3: Connect the following cables on the positive bus bar (mark 1).

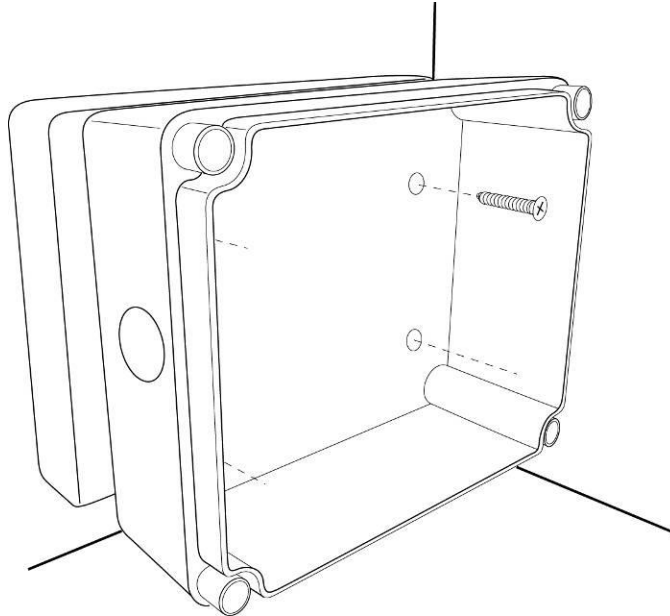
- Step 4: **Fix the unit to the console.**

Before attaching the unit to the side of the console, stick a piece of plywood on in order to increase the thickness to hold the screws.



INSTALLATION AND CIRCUIT - Electricity

Attach the unit onto the plywood using the wood screws (not supplied).

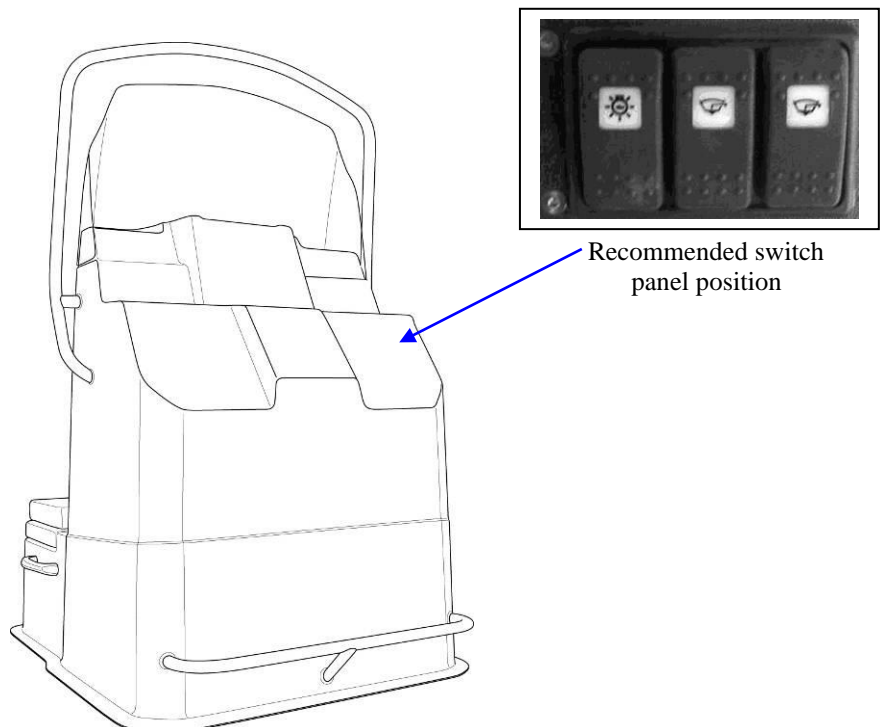


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IV-2-5-4 Switch wiring (bilge pumps + lights)

- Step 1: Position the switches on your console (taking the harness length into consideration).

If your boat has a Z61128 console, we recommend positioning the switch panel as shown below.

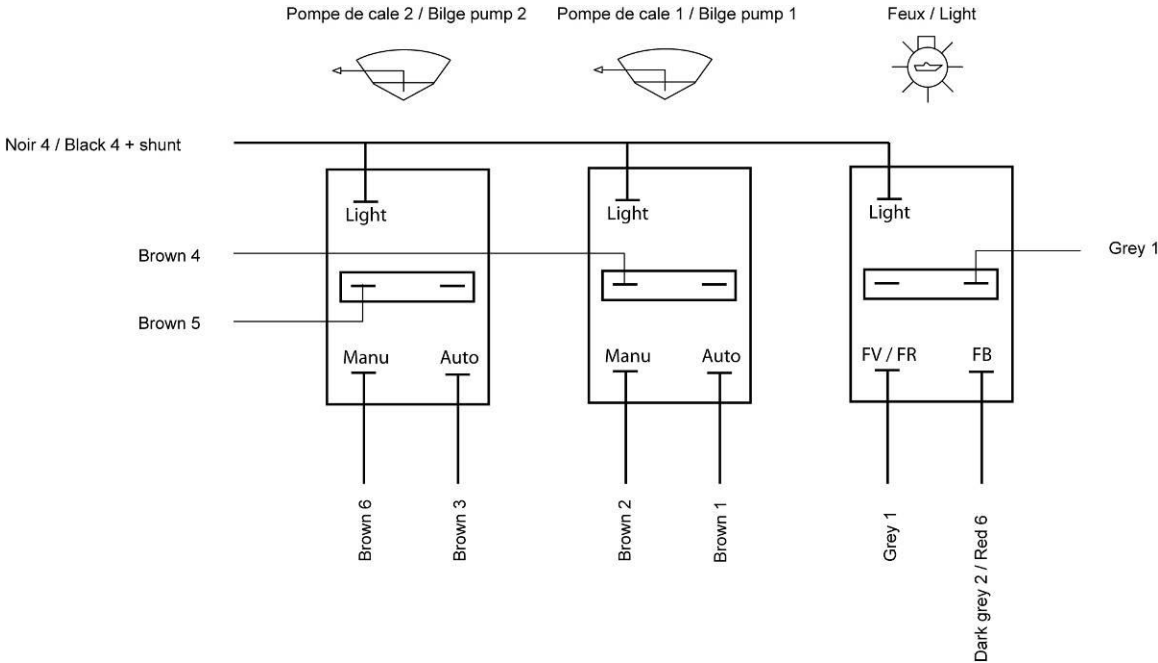


INSTALLATION AND CIRCUIT - Electricity

- Step 2: Wiring

Group of wires to connect

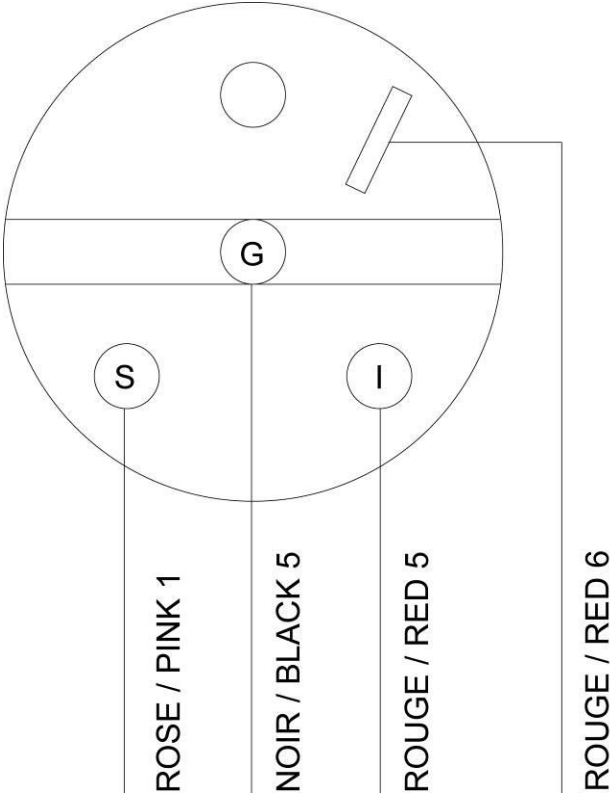
Wiring seen from behind the switches



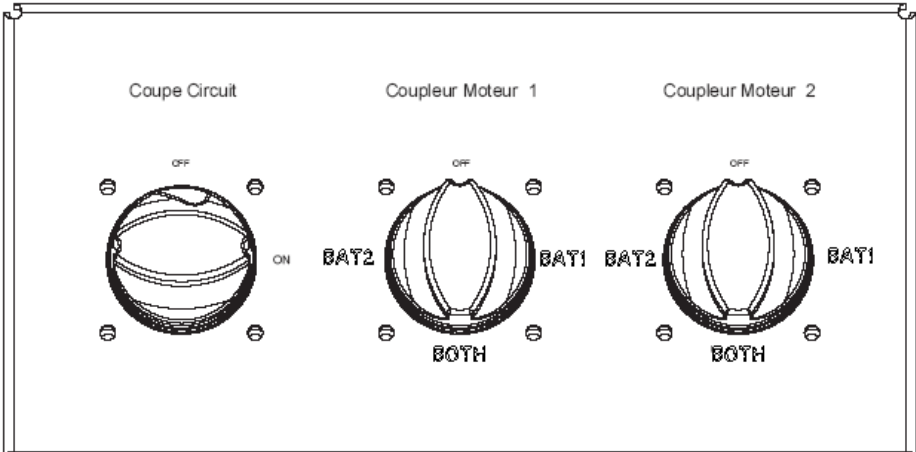
INSTALLATION AND CIRCUIT - Electricity

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IV-2-5-5 Fuel gauge holder wiring (rear view)



IV-2-5-6 Circuit-breaker and battery isolation switch operation



The boat is factory-mounted with a circuit breaker and two battery couplers (for dual-engine configuration).
 For a single engine configuration, only one coupler will be used.

INSTALLATION AND CIRCUIT

The circuit breaker isolates the console unit power supply.

NOTE:	After each use, set the circuit breaker back to OFF.
--------------	--

The battery couplers allow the engines to be started either with one battery per engine, or by coupling the batteries (in parallel), or with a single battery.

IV-2-5-7 Table of possible configurations

COUPLER STATE		RESULT
COUPLER 1 TO "OFF"	COUPLER 2 TO "OFF"	<i>THE ENGINES AND THE BATTERIES ARE ISOLATED</i>
COUPLER 1 TO "BAT 1"	COUPLER 2 TO "BAT 2"	<i>EACH ENGINE STARTS WITH ITS RESPECTIVE BATTERY. ALWAYS PUT THE COUPLERS IN THIS CONFIGURATION</i>
COUPLER 1 TO "BAT 1"	COUPLER 2 TO "BAT 1"	<i>BOTH ENGINES START WITH BATTERY 1 (used when battery 2 fails)</i>
COUPLER 1 TO "BAT 2"	COUPLER 2 TO "BAT 2"	<i>BOTH ENGINES START WITH BATTERY 2 (used when battery 1 fails)</i>
COUPLER 1 TO "BOTH"	COUPLER 2 TO "BOTH"	<i>BOTH ENGINES START COUPLING THE 2 BATTERIES</i>

INSTALLATION AND CIRCUIT – Connecting the Options


IV -2-6-CONNECTING THE OPTIONS

IV -2-6-1-Precautions:

The boat is factory-mounted with 2 bilge pumps and navigation lights. Nevertheless, 2 spare positions remain in the fuse box (below the console) to connect additional accessories in some conditions:

- ① The accessories to add must be connected on the console.
- ② The accessories are divided into two categories:
 - A** → accessories used or that may be used continuously in normal boat operation,
 - B** → accessories only used intermittently.

A	and	B
Hold fan		Cigarette lighter
Radio		Miscellaneous lights
Depth-finder		Buzzer
GPS		Miscellaneous electronic equipment
Projector		Shower pump
Alarm system		Max. retained power
Fridge		60W maxi
VHF		
Σ		
	180 W max.	

 WARNING	<p>You must make sure that the total power consumed by all <u>added</u> column A accessories does not exceed 180 W (15 A) <u>AND</u> that the max. power of an accessory in column B does not exceed 60 W (5 A).</p> <p>The cross-sections of the bundle cables have been calculated for these values; non-compliance with this rule may cause electrical malfunction and short-circuiting.</p>
---	---

You may connect the options directly to the positive and negative console bus bars (within the max. power limits), using an approved fuse-holder.

INSTALLATION AND CIRCUIT – Connecting the Options

Example 1

To add:

- a 72-W VHF,
- a 36-W GPS,
- a 60-W radio,
- a 72-W cigarette lighter,
- a 20-W clock.

A	
Hold fan	
Radio	60 W
Depth-finder	
GPS	36 W
Projector	
Alarm system	
Fridge	
VHF	72 W
Σ	168 W (< 180 W) ☺

and

B	
Miscellaneous lights	
Miscellaneous electronic equipment	20 W (clock)
Shower pump	
Max. retained power	60W (\leq 60W) ☺

CONCLUSION	☺
------------	---

Example 2

To add:

- a 60-W VHF,
- a 36-W GPS,
- a 48-W radio,
- a 120-W projector.

A	
Hold fan	
Radio	48 W
Depth-finder	
GPS	36 W
Projector	120 W
Alarm system	
Fridge	
VHF	60 W
Σ	264 W (> 180 W) ☹

and

B	
Miscellaneous lights	
Miscellaneous electronic equipment	
Shower pump	
Max. retained power	0 (< 60W) ☹

CONCLUSION	☹
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INSTALLATION AND CIRCUIT – Connecting the Options

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Example 3

To add:
 a 60-W GPS,
 a 60-W radio,
 a 120-W buzzer.

A	
Hold fan	
Radio	60 W
Depth-finder	
GPS	60 W
Projector	
Alarm system	
Fridge	
VHF	
Σ	120 W (< 180 W) ↻

and

B	
Miscellaneous lights	
Miscellaneous electronic equipment	
Shower pump	
Max. retained power	120 W (> 60 W) ↻

CONCLUSION	⚠
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NOTE:	<p>Some manufacturers indicate the intensity instead of the power consumed. For direct current (the case here), simply multiply by 12 to obtain the power and divide the power by 12 to obtain the intensity the device consumes.</p>
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IV -4-2-6-2Wiring:

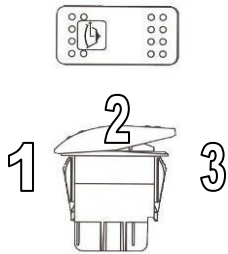
- ① Choose a free fuse position,
- ② Connect the accessory power supply to the position terminal with a 6-mm female tab,
- ③ If you must add a cable for connection, the minimum cross-section is 1.5 mm² and it must comply with "marine" cable recommendations (UL1426 or SAE J378 or SAE J1127 or SAE J1128 or, generally speaking, recommendations ABYC and/or CE),
- ④ Connect the accessory grounding cable to the grounding terminal with a dia. 5 ring lug (same remark as above for the cable),
- ⑤ Use an ATO type fuse, max. intensity 15 A and with a higher operating intensity that the accessory.


INSTALLATION AND CIRCUIT – Connecting the Options

IV -2-7-BILGE PUMP OPERATION

The bilge pump operation is independent from the battery switch position; the control switch  is always powered.

- ① Automatic ON (set position); in this position the bilge pump operates automatically. The indicator light is lit.
- ② OFF; in this position (set position), the bilge pump is shut down. The indicator light is not lit.
- ③ Forced ON; the switch must be held for forced operation. As soon as you release the switch, it returns to OFF (2).






 WARNING	<p style="text-align: center;">WHEN MOORED, SET THE BILGE PUMP SWITCH TO AUTOMATIC.</p>
<p>NOTE:</p>	<p style="text-align: center;">ZODIAC RECOMMENDS USING A TARPAULIN OR COCKPIT COVER TO PREVENT RAINWATER FROM COMING IN.</p>

INSTALLATION AND CIRCUIT - Electricity

IV-2-8- Battery (not supplied)

Comply with ZODIAC recommendations and battery manufacturer recommendations for everyday maintenance.

	<p>Battery care:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Keep the battery clean and dry to avoid premature wear <input checked="" type="checkbox"/> Tighten and maintain the terminal lugs coating them regularly with Vaseline
---	--

 CAUTION	<p>WATER FROM THE WATER COLLECTION SYSTEM CONTAINS MINERALS THAT DAMAGE THE BATTERIES. CONSEQUENTLY ALWAYS TOP UP WITH DISTILLED WATER.</p>
 WARNING	<ul style="list-style-type: none"> • KEEP BATTERIES AND BATTERY ACID OUT OF THE REACH OF CHILDREN • ALWAYS KEEP BATTERIES UPRIGHT • WHEN ADDING BATTERY ACID OR RECHARGING THE BATTERY, ALWAYS REMOVE IT FROM THE ENGINE COMPARTMENT • BATTERY ACID IS A TOXIC AND DANGEROUS SUBSTANCE IT CONTAINS SULPHURIC ACID THAT CAN CAUSE SERIOUS BURNS AVOID CONTACT WITH THE SKIN, EYES AND CLOTHING • BATTERIES MAY GIVE OFF EXPLOSIVE GASES REMOVE ALL SOURCES OF SPARKS, NAKED FLAMES, CIGARETTES, ETC. • ONLY CHARGE OR USE A BATTERY IN A WELL AIRED PLACE. ALWAYS PROTECT YOUR EYES WHEN WORKING CLOSE TO A BATTERY.

<p>NOTE:</p>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> If you do not plan to use your Zodiac® for a month or more, remove the battery and store it in a cool, dark and dry place. Completely recharge the battery before reusing it. <input checked="" type="checkbox"/> If the battery is to be put away for a long period, check the density of the battery acid at least once a month and recharge the battery when the density is too low. Battery acid density: 1.28 at 20 °C
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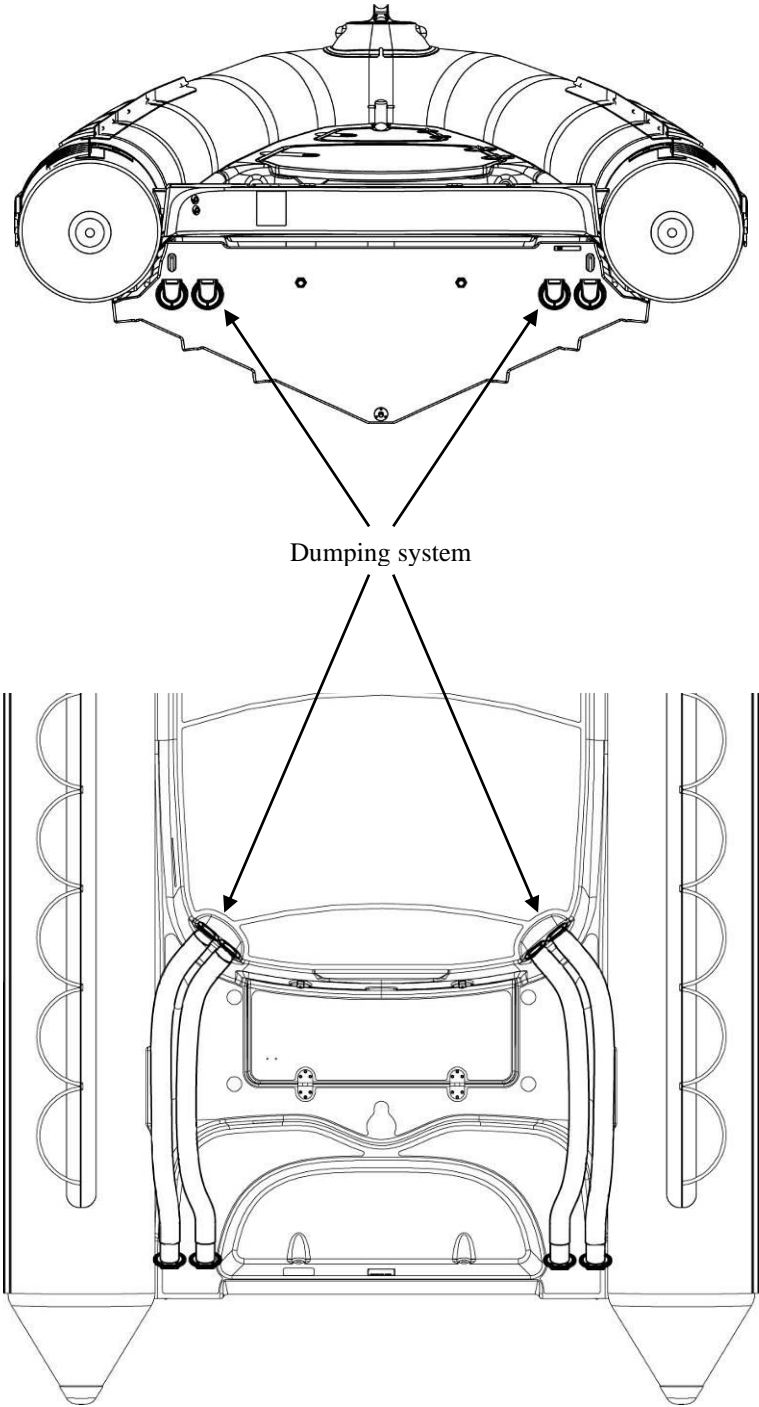
<p>NOTE:</p>	<p>When you stop using the boat, set the circuit-breaker to OFF.</p>
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INSTALLATION AND CIRCUIT - Drainage

IV -3-DRAINAGE:

IV -3-1-Description of essential functional parts:

The boat empties itself, it has 4 quick drain holes at the rear of the deck.




INSTALLATION AND CIRCUIT - Drainage

IV-3-2-Hull plug hole

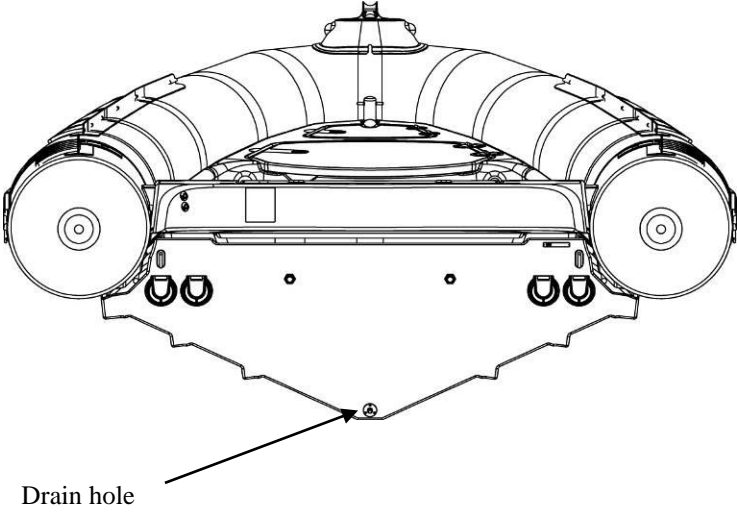
IV-3-2-1-Boat outside the water (on trailer, cradle, etc.)

	POSITION OPEN, PLUG REMOVED.
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IV-3-2-2-Boat in the water

	POSITION CLOSED, PLUG(S) IN POSITION. (MAKE SURE THE PLUG IS PROPERLY CLOSED.)
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INSTALLATION AND CIRCUIT - Steering

IV-4-STEERING

A hydraulic jack (optional) may be used for the single-engine configuration and in some cases for the dual-engine (see max. authorized power).

Comply with the steering manufacturer's recommendations (installation, use and maintenance).

For optimum use of your boat, see your dealer.

INSTALLATION AND CIRCUIT - Fire

IV-5- FIRE

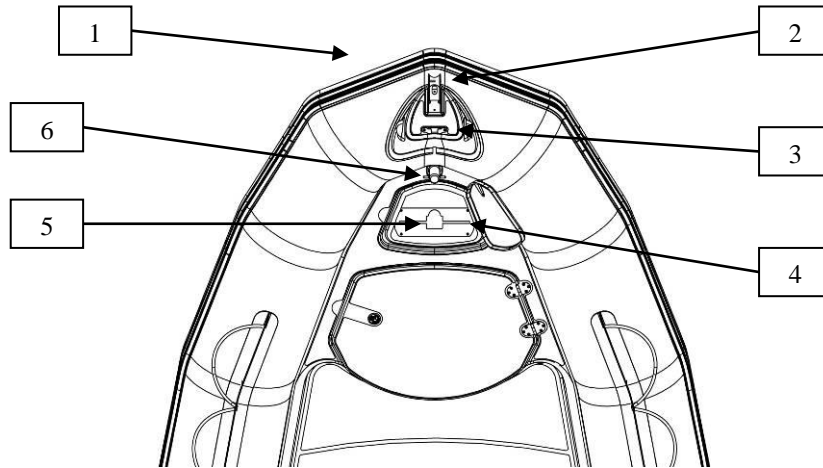


WE RECOMMEND YOU KEEP AN EXTINGUISHER ON BOARD. COMPLY WITH THE LAWS APPLICABLE IN YOUR COUNTRY.

INSTALLATION AND CIRCUIT - Anchoring/Mooring

IV-6- ANCHORING/MOORING


IV -6-1-Description of essential functional parts:



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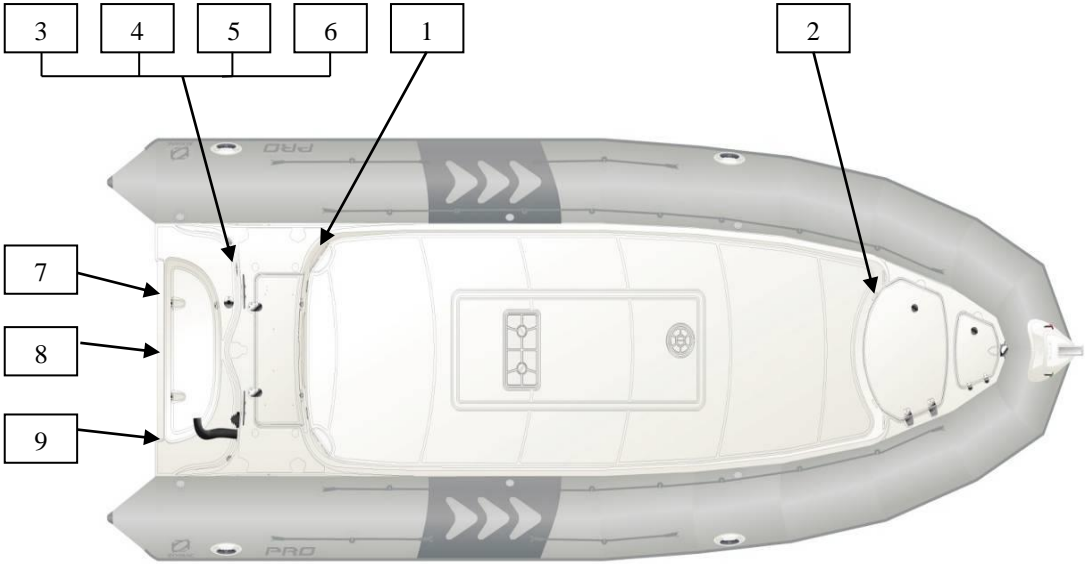
MARK	DESIGNATION
1	Chain plate
2	Roller chock + rea
3	Fairlead
4	Anchoring chest
5	Anchor support plate
6	Mooring cleat

IV-6-2- Use

 WARNING	<p>THE FAIRLEAD AND CLEATS CAN ONLY BE USED FOR OCCASIONAL MOORING OF THE BOAT. FOR PERMANENT MOORING, USE THE BOW CHAIN PLATE PROVIDED AT THE FRONT OF THE BOAT.</p>
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INFORMATION AND IDENTIFICATION PLATES


V-1-SAFETY LABEL AND REGISTRATION PLATES POSITION



INFORMATION AND IDENTIFICATION PLATES

V -2-SAFETY LABEL AND REGISTRATION PLATES DESCRIPTION

	⚠ WARNING	⚠ AVERTISSEMENTS	1
	<ul style="list-style-type: none"> DO NOT TOUCH BATTERY TERMINALS (SHOCK AND ACID HAZARDS) DISCONNECT BOTH LEADS BEFORE REMOVING BATTERY CONNECT RED LEAD TO POSITIVE (+) TERMINAL CONNECT BLACK LEAD TO NEGATIVE (-) TERMINAL 	<ul style="list-style-type: none"> NE PAS TOUCHER LES TERMINAUX DE LA BATTERIE (RISQUE DE CHOC ELECTRIQUE ET DE CONTACT AVEC L' ACIDE DE LA BATTERIE) DEBRANCHER LES 2 FILS DE SORTIE AVANT DE RETIRER LA BATTERIE RELIER LE CABLE ROUGE A LA BORNE (+) RELIER LE CABLE NOIR A LA BORNE (-) 	

	⚠ WARNING	⚠ AVERTISSEMENTS	2
	<p style="text-align: center; margin: 0;">GASOLINE IS HIGHLY INFLAMMABLE AND EXPLOSIVE</p> <ul style="list-style-type: none"> STOP ENGINE BEFORE REFUELING REFUEL IN WELL VENTILATED AREA NEVER REFUEL WHILE SMOKING, AROUND SPARKS OR OPEN FLAME AVOID SPILLING FUEL. WIPE UP ALL FUEL SPILLS IMMEDIATELY LEAKING FUEL IS A FIRE HAZARD AND EXPLOSION HAZARD INSPECT FUEL SYSTEM BEFORE EACH USE 	<p style="text-align: center; margin: 0;">L' ESSENCE EST TRES FORTEMENT INFLAMMABLE ET EXPLOSIVE</p> <ul style="list-style-type: none"> ARRETER LE MOTEUR AVANT TOUT REMPLISSAGE. NE PAS FUMER LORS DU REMPLISSAGE. FAIRE LE PLEIN DANS UN ENDROIT VENTILE. EVITER DE RENVERSER DU CARBURANT. ESSUYER IMMEDIATEMENT TOUTES LES FLAQUES DE CARBURANT CREEES LES FUITES DE CARBURANTS CONSTITUENT UN RISQUE D' INCENDIE ET D' EXPLOSION VERIFIER LE CIRCUIT CARBURANT AVANT CHAQUE UTILISATION 	

⚠ CAUTION	⚠ ATTENTION	3
<p style="text-align: center; margin: 0;">IMPROPERLY TOWING YOUR BOAT CAN CAUSE SEVERE DAMAGE TO YOUR BOAT.</p> <ul style="list-style-type: none"> NEVER TOW IN OPEN SEAS NEVER TOW ABOVE 6 KNOTS 	<p style="text-align: center; margin: 0;">UN REMORQUAGE INAPROPRIE PEUT ENDOMMAGER VOTRE BATEAU</p> <ul style="list-style-type: none"> NE PAS REMORQUER EN PLEINE MER NE PAS REMORQUER A PLUS DE 6 NOEUDS 	

⚠ WARNING	⚠ AVERTISSEMENT	4
<p>DO NOT LIFT THE BOAT WITH PASSENGERS ON BOARD</p>	<p>NE PAS SOULEVER LE BATEAU AVEC DES PASSAGERS A BORD</p>	

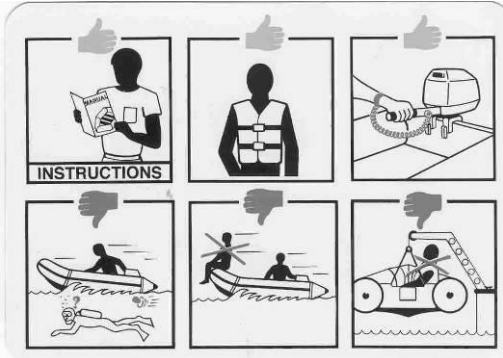
INFORMATION AND IDENTIFICATION PLATES

<p style="text-align: center;">⚠ DANGER</p> <p>TO AVOID INJURY OR DEATH, SHUT OFF ENGINE WHEN NEAR SWIMMERS OR PRIOR TO USING SWIN PLATFORM AND BOARDING LADDER</p>	<p style="text-align: center;">⚠ DANGER</p> <p>POUR EVITER DES BLESSURES OU LA MORT, COUPER LE MOTEUR EN APPROCHANT DE NAGEURS, ET AVANT TOUTE UTILISATION DE LA PLATEFORME ARRIERE OU DE L' ECHELLE DE BAIN</p>
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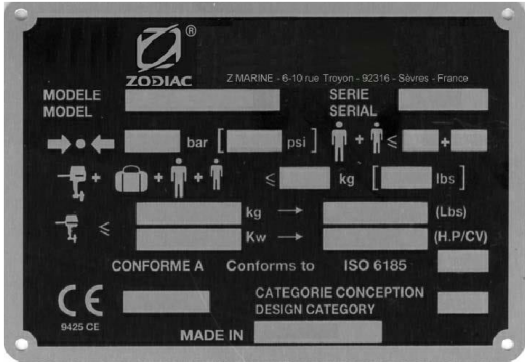
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<p style="text-align: center;">⚠ DANGER</p> <p>A FIRE EXTINGUISHER MUST BE CARRIED AT ALL TIMES</p>	<p style="text-align: center;">⚠ DANGER</p> <p>UN EXTINCTEUR DOIT ETRE DISPONIBLE EN PERMANENCE A BORD</p>
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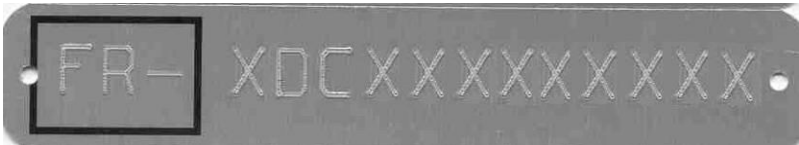
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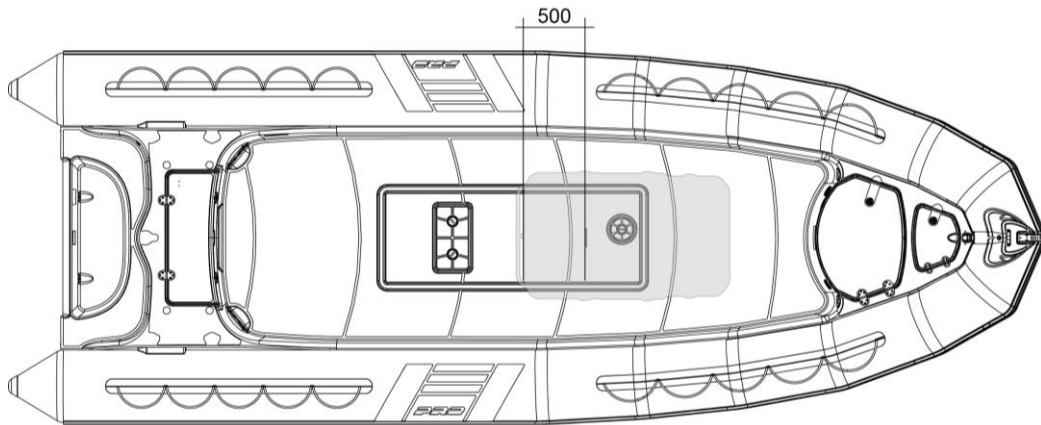
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	<p style="text-align: center;">MAKE SURE THAT THE LABELS ARE PRESENT AND LEGIBLE. CONTACT YOUR DEALER TO OBTAIN NEW ONES IF NECESSARY.</p>
--	---

LOCATION OF OPTIONAL ACCESSORIES

VI -1 LOCATION OF CONSOLE Z61128 (For navigation category B or C)

Your boat may be fitted with an optional console (see your Zodiac dealer). To optimise the use of the boat and retain all accesses to deck wells (tank/electrical wiring and cable feedthrough accesses), we recommend placing the console in the area indicated below.



FEEDTHROUGH (NOT SUPPLIED) MUST ONLY BE PLACED IN THE GREY AREA SHOWN ABOVE.

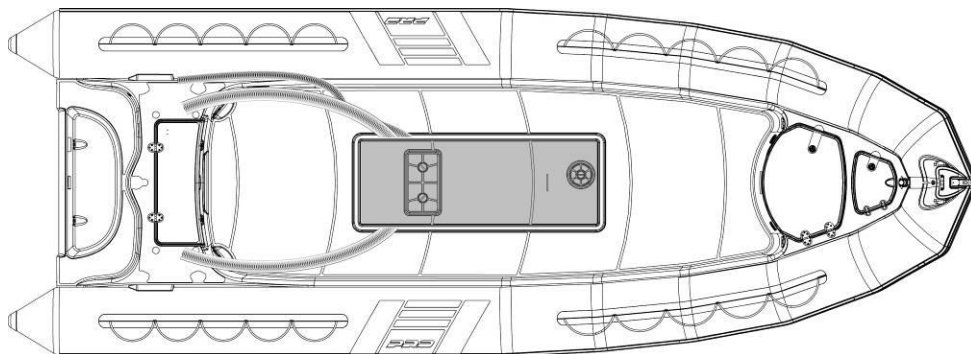
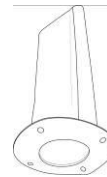
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VI-2 CABLE FEEDTHROUGH


Cables and fuel hoses are threaded below the boat deck (through factory pre-installed sleeves).

Cable exit on the deck (through a cable feedthrough)

Cable feedthrough area.



LOCATION OF OPTIONAL ACCESSORIES

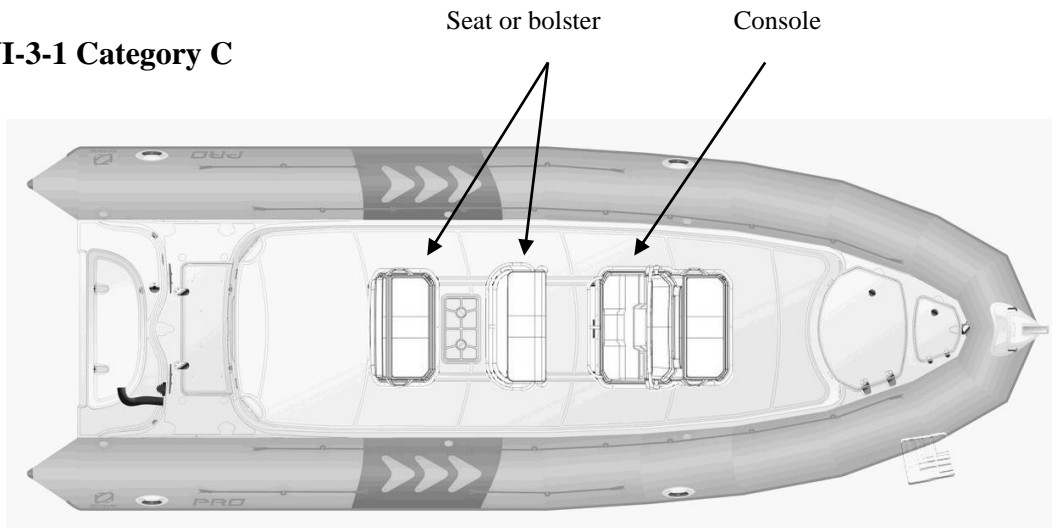
 WARNING	<p>FOR SAFETY REASONS, THE TANK HATCH MUST REMAIN ACCESSIBLE AND UNENCUMBERED BY THE POSITION OF ACCESSORIES. IT MAY HOWEVER BE ENTIRELY COVERED BY THE CONSOLE, WHILE REMAINING ACCESSIBLE THROUGH THE CONSOLE FRONT CHEST.</p>
---	---

 CAUTION	<p>NEVER DRILL THE TANK AREA WITH A BIT PROTRUDING MORE THAN 30MM FROM THE DRILL HEAD AND DO NOT USE SCREWS OVER 20 MM LONG.</p>
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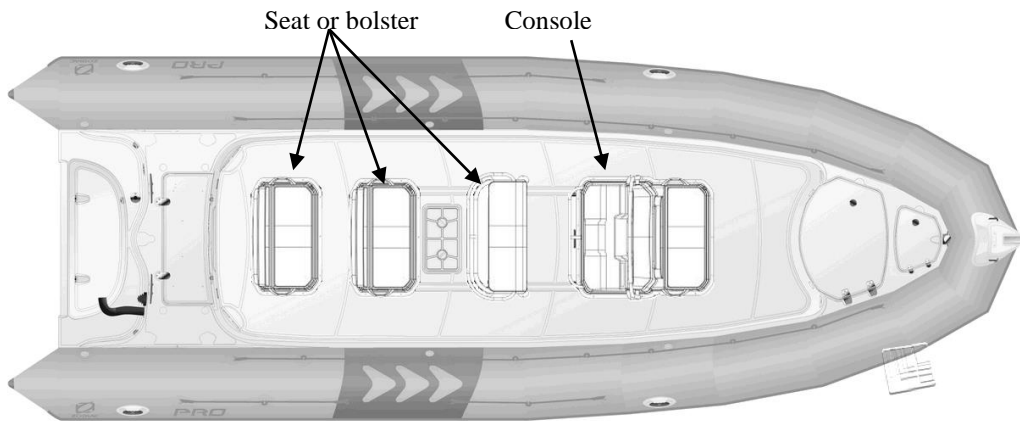
VI-3 Position of accessories SEAT / BOLSTER (per design category)

Depending on the navigation category in which the boat is used, the diagram below shows 2 positions for the seat or bolster depending on the number of seats required.

VI-3-1 Category C

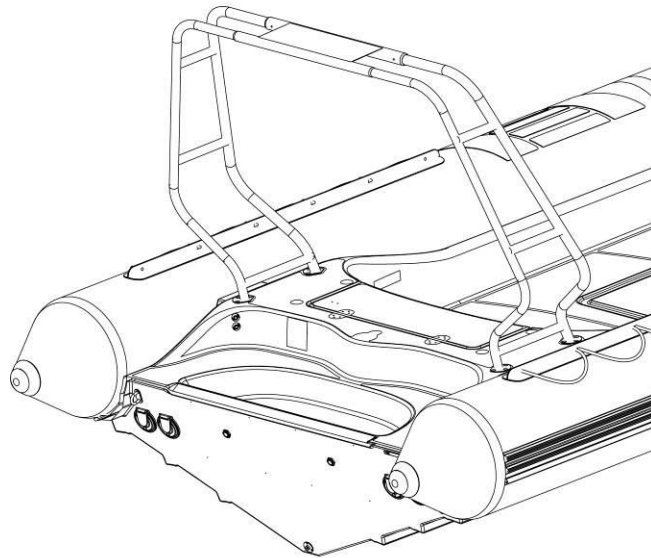


VI-3-1 Category B. The number of persons in category B is limited to 10,

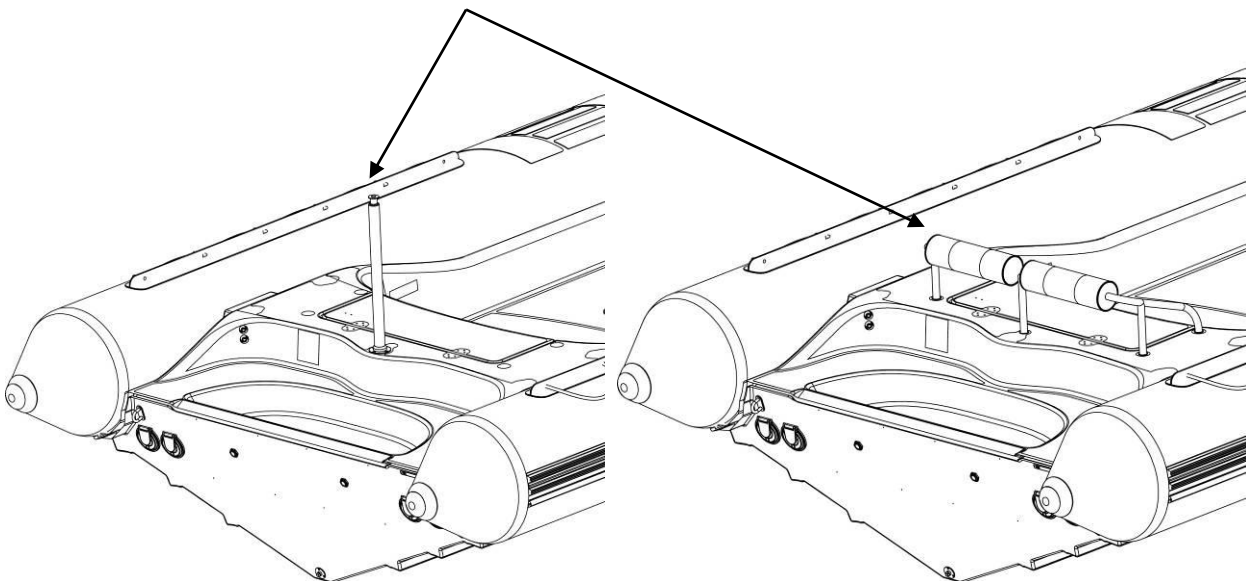


LOCATION OF OPTIONAL ACCESSORIES

VI-4-Position of ROLL BAR accessory (more detailed instructions are supplied with each option)



VI-5-Position of accessory ski mast/ rear seatback

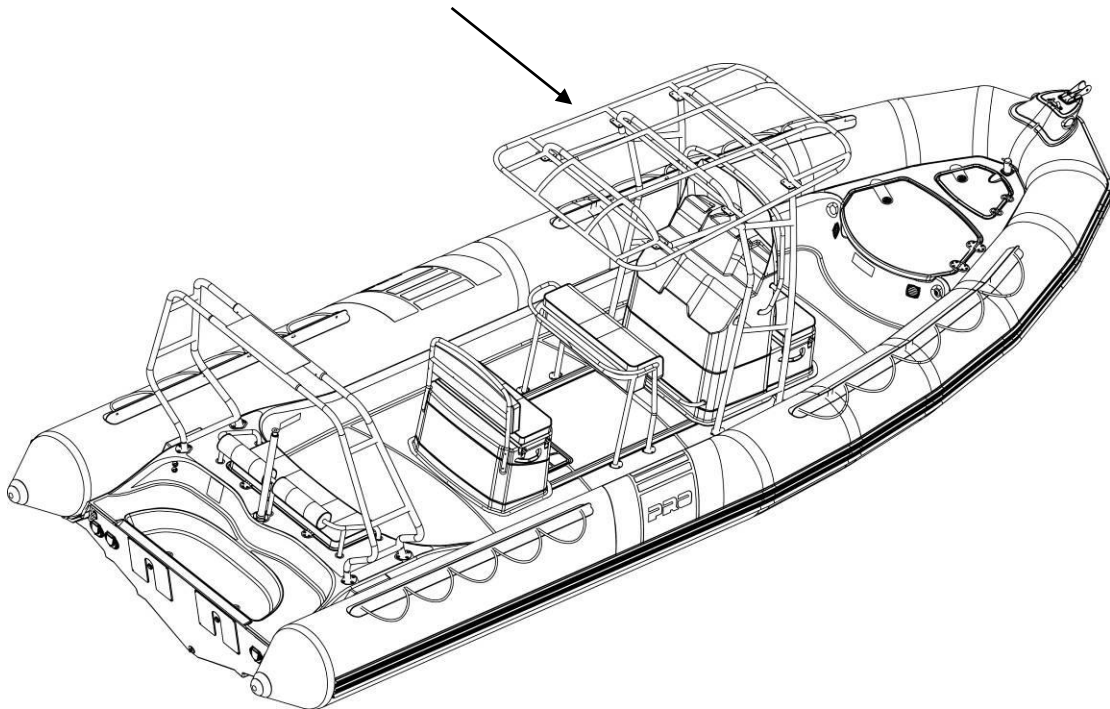




THE SKI MAST CAN BE USED ONLY FOR SKI OR WAKEBOARD. FOR TOWING BOATS OR BUOY, USE REAR CHAIN PLATE

LOCATION OF OPTIONAL ACCESSORIES

VI-1-6-Position of T-TOP accessory





6-10 Rue Troyon
92316- Sèvres - France

www.zodiacmarine.com

Pro 850

Code ZR20230

Edition 4