

# BAJLINER®

245 SB



# Manual



AFP937A



#### Engine: MerCruiser 5.7Litre V8 Sterndrive with dual counter rotating propellers

## Hull Identification Number: **US-USDB215KH405**

#### Hull Identification Number

• The Hull Identification Number (HIN) is located on the starboard side of the transom.





When we came to Lake Macquarie, we were disappointed to find that the only way to independently explore the waterways was to hire "no boat license required" vessels.

We hope you like and appreciate what we are providing with this boat and that you will find a delight in traversing this wonderful area.

We have fitted out to suit our needs and tastes. We hope that they are to your liking.

**Havarest** was the name of the lan's Grandparents weekender on the Woronora River (Sutherland Shire) and was enjoyed by the family from 1938 until assumed by the Crown as deemed too close for habitation to the Lucas Heights Nuclear Facility in about 1958.

Above the inside of the main door header was the sign

## "ALL of OUR GUESTS BRING US HAPPINESS!

#### Some as they arrive, and some as they leave."

we have done this same signage on the cockpit side of the access door from the swim platform

we sincerely hope that you shall always be remembered as one of the former.

#### AFP937N HAVAREST

Registered Domain: www.LakeMacquarie.boats Location Marmon Point Marina 1 Nanda St, Marmong Point NSW 2284 Dry Storage Bay 09 2005 Bayliner 245SB with a 5.7 litre 260HP Mercruiser Inboard Engine Body: Express/Sports Cruiser. Colour: White/Blue Hours Indicating: n/a Hull Type: Mono Hull Material: Fibreglass Length 7.3m, Width 2.6m, Weight 2476kg (dry) Draft Up 0.43m Down 0.84m Bridge clearance 3m Best Cruising speed 42kph (23knots) at 3500RPM & 38Litre/hr Top speed 61kph (33knots) at 4850RPM (but thirsty at about 60L/hr) Capacity: 12 Persons but suggest 9 adult max. Key # 44H - GPS/Chartplotter Manuals are in the Document folder Fuel capacity 242Litres (check c/L at the Marina Pump), Note refueling from drum or can is not appropriate. Water tank 20Litre, Sewer Waste Holding tank 20Litre Registration AFP937N expires 25/05/2023 Inclusions: Fixed Bimini Cover with removable Clear side curtains, Garmin GPS/Chartplotter/Depth Finder, VesselView Mobile Uniden UM355 Marine Radio, Fusion Bluetooth Stereo, Carpuride cellphone intregration Fishing Rod Holders at stern, Toilet, Sink, Shower Gel, Shampoo & Conditioner dispenser, towels. Origo 2500E Cooktop (elec/spirit), Microwave (flat plate), Norcold Refrigerator (300W), Hot and Cold Waterspout for Galley Sink, Cutting Board, Hot Cold cockpit wash shower. (Note Hot may not be operative) 4x Mugs, 4x Plates, 4x Bowls, Cutlery. Double berth & linen (2x pillows, sheets & duvet) + dinette converts to double with inserts & cushion pads stowed in berth area Removable Dining Table and Cockpit Table, Marine Air Systems Air-Conditioning (not used), Carbon-Monoxide Alarms, Fire Extinguishers, Engine bay auto EFE fireball suppression, Boat Fenders, Docking lines, First Aid Kit (type F) Operating Manuals, Life Jackets (2 child, 1 Junior, 2 small, 1 medium, 1 large, 2 extra-large + cushion type) Optional 1: Tow Toy (banana) and tow line, inflatable aqua pad 2.7m x 2.9m, Fishing Rods, Lures & tackle, Boathook, Dock-hook, Umbrella, fenders & lines 12VDC & 240VAC and USB outlets & AUX Battery (12V 100AH LiPO4) Solar Panels (1140W), Solar Charger Controller, 1500W (3000Wpeak) sinewave 240VAC inverter, 240VAC power selector Shore Power or Inverter and Power Distribution Switchboard 32" Flat Screen DTV with ChromeCast + TV Omni Antenna, Nintendo Switch + games 4G Wireless Broadband Hub (Havarest), Dyson battery vac. Google Nest Alarm system, 240VAC Power monitor system. Lightbar forward facing flood/spot light, swim platform worklight Boatcover (used at dry storage bay)

Tender 2.5m Aquacraft with oars & MinnKota 42lb (0.75HP) outboard + 380W solar awning suncover & 12VDC Colman 44AH Battery

## **CONTENTS**



#### **Chapter 1: Welcome Aboard!** 1

- 1 **Dimensions and Tank Capacities**
- 1 Layout View
- 1 **Dealer Service**
- Warranty Information 1
- 2 **Boating Experience**
- 2 **Engine & Accessories Guidelines**
- 2 **Engine & Accessories Literature**
- 3 Safety Standards
- 3 **Qualified Maintenance**
- 4 **Special Care For Moored Boats** 4 Sacrificial Anodes (Zincs)
- 5 Carbon Monoxide (CO)
  - 5 Facts about CO
  - 6 Where and How CO Can Accumulate
  - 6 How to Protect Yourself and Others From CO
  - 7 Trip Checklist
  - 7 Monthly Checklist
  - 7 Annual Checklist
  - 7 Carbon Monoxide Alarm System
  - 8 More Information

#### 9 **Chapter 2: Locations**

- 9 Exterior Views
  - 9 Hull views
  - 10 Deck Views
  - 11 Helm
- 12 **Component Locations**

#### Chapter 3: Propulsion & 13 **Related Systems**

- 13 Engine
- 13 Engine Room Ventilation System
- 14 Fuel System 15 Fuel Fill and Vent 15 Fuel Filters 15 Anti-siphon Valve
- Quick Oil Drain System 16

#### **Chapter 4: Controls** 17

- 17 Steering
- Shift/Throttle 17
- Power Trim and Tilt 17
- 18 Trim Tabs

#### Chapter 5: Navigation & 19 **Communication Equipment**

- 19 Gauges 19 Cleaning Gauges 19 Gauge Fogging 19 Fuel Gauge
- 19 **VHF** Radio 19 Radio Transmission Interference
- Chartplotter, Depth + Fishfinder 20
- 20

#### 21 **Chapter 6: Plumbing**

- 21 **Bilge Pumps** 22 Autofloat Switches
- 23 Seawater Systems 23 Seacocks 23 Seawater Strainers
- 24 Freshwater System 25 Freshwater System 25 Transom Shower 26 Water Heater
- 27 **Drain Systems** 
  - 27 Deck Drains
  - 27 Sink Drains 27 Shower Drains
  - 27 Sump Box Cleaning
- 28 Marine Head With Holding Tank 28 Using The Marine Head 29 Macerator



#### 30 Chapter 7: Deck Equipment

- 30 Canvas
- 31 Cleats and Tow Eyes
- 32 Chapter 8: Appliances & Entertainment Systems
- 32 Refrigerator
- 33 Alcohol/Electric Stove
- 33 Audio & Visual Equipment
- 34 Chapter 9: Convertible Seats, Beds, & Tables
- 34 Dinette/V-Berth

#### 35 Chapter 10: Lights

- 35 Care and Maintenance
- 35 Navigation Lights
- 35 Interior & Exterior Lights

#### 36 Chapter 11: Heating & Air Conditioning

36 Air Conditioning System

#### 37 Chapter 12: Electrical System

- 38 12-Volt DC System
  38 Batteries
  38 Fuses and Circuit Breakers
  38 Battery Switch
  38 Battery Switch Positions
  39 Alternator
  39 Battery Charger
  39 12-Volt Accessory Outlets
- 40 240-Volt AC System
  41 Shore Power
  43 Connecting To Shore Power
  44 Transfer Switch
- 45 Electrical Routings
  45 Deck Electrical Harness
  46 Hull Electrical Harness
  47 240 Volt AC System
  48 Battery System
  49 Bonding Harness
- 50 Wire Diagrams 50 Single Dockside 51 Dual Dockside 52 Engine Electrical System

#### 53 Important Records

54 Float Plan



## Hazard Boxes & Symbols

The hazard boxes and symbols shown below are used throughout this supplement to call attention to potentially dangerous situations which could lead to either personal injury or product damage. **Read ALL warnings carefully and follow all safety instructions.** 

## A DANGER!

This box alerts you to immediate hazards which *WILL* cause severe personal injury or death if the warning is ignored.

## WARNING!

This box alerts you to hazards or unsafe practices which *COULD* result in severe personal injury or death if the warning is ignored.

#### 

This box alerts you to hazards or unsafe practices which *COULD* result in minor personal injury or cause product or property damage if the warning is ignored.

## NOTICE

This box calls attention to installation, operation or maintenance information, which is important to proper operation but is not hazard related.





This *Manual* provides specific information about the boat. Keep this *Manual* on the boat in a secure, yet readily available place.

## **Dimensions and Tank Capacities**

Overall Length	Bridge Clearance	Beam	Draft (Drive Up)	Draft(Drive Down)	Fuel Capacity (Litres)	Freshwater Capacity (Litres.)	Waste Holding Tank Capacity (Litres.)
7.32m	1.83m	2.44m	0.304m	0.610m	245	75	75

Havare*s*t



#### Details

- Ian is your key to advice about the boat.
- Ask Ian to explain *all* systems *before* taking setting out with this boat.
- You must hold a current Maritime Boat License and produce evidence of this prior to skippering.
- You shall either need to replenish any fuel used. The Fuel tank should be full at commencement of your taking of the vessel.
- You must not take the boat outside of the waterway known as Lake Macquarie NSW.

You must have the windscreen "swing open panel" closed and secured when under-way at "planing speeds or above".

You must not allow anyone on the foredeck area whist under-way.

The boat is equipped with location tracking, which must not be interfered with or disabled and assistance is provided by calling Ian on 0414472042

## **Boating Experience**



## A WARNING!

#### **CONTROL HAZARD!**

A qualified licensed operator *must* be in control of the boat at *all* times. *DO NOT* operate this boat while under the influence of alcohol or drugs.

If you are *not* familiar with this class of boat, for your own comfort and safety, obtain handling and operating experience *before* assuming command of the boat.

For issues associated with the operation of the boat, contact Ian on 0414-472-042

If things go really pear shaped, contact Marine Rescue Lake Macquarie (02)4971-3498

# Engine & Accessories Guidelines

## Engine & Accessories Literature

- The engine and accessories installed on the boat come with their own operation and maintenance manuals These are provided for information only - unless there is a catastrophic event, please refrain from applying any remedial or tuning of the plant or equipment.
- Mechanical equipment on this boat is serviced and maintained by Coastwide Marine's Bruce Theodore who can be contacted on 0427-725-186 *please leave anything associated for him to address.*







FALLING and ROTATING PROPELLER HAZARD!

*NEVER* allow anyone to ride on parts of the boat *not* designed for such use.

• Sitting on seat backs, lounging on the forward deck, bow riding, gunwale riding or occupying the transom platform while underway is especially hazardous and *may well* cause personal injury or death. You the skipper are responsible for managing this!



ROTATING PROPELLER and CARBON MONOXIDE POISONING HAZARD!

- *NEVER* allow anyone to occupy, or hang from, the back deck or swim platform while the engine(s) are running.
- Teak surfing, dragging, or water skiing within 6 metres of a moving watercraft can well be fatal.

## DANGER!

PERSONAL SAFETY HAZARD!

ALWAYS secure the anchor and other loose objects *before* getting underway. The anchor and other items that are *not* properly secured can come loose when the boat is moving and cause significant damage, personal injury or death.

- Your boat's mechanical and electrical systems were designed to meet safety standards in effect at the time it was built and have been updated to reflect all current marine survey requirements.
- Some of these standards were mandated by law, all of them were designed to insure your safety, and the safety of other people, vessels and property.

In addition to this *Manual*, please read **all** accessory instructions for important safety standards and hazard information.

## **Qualified Maintenance**

CARBON MONOXIDE

## WARNING!

To maintain the integrity and safety of this boat, *only* qualified personnel are permitted to perform maintenance on, or in any way modify: The steering system, propulsion system, engine control system, fuel system, environmental control system, electrical system or navigational system.

- The owner is responsible to maintain the boat's systems (listed in the warning above) as designed and failure to do so could violate legigislated requirments and could expose guests, visitors, and/or support staff to the danger of bodily injury or accidental death.
- Follow the instructions provided in this *Manual*, as well as guidance from the engine owner's manual and *all* accessory instruction sheets and product manuals which are also available.
- Whist the owner is obligated to provide a safe vessel physically, the skipper is responsible for the safety and wellbeing of all those aboard or attached to their party or invited onto the boat.



## **Special Care For Moored Boats**

## NOTICE

- To help seal the hull bottom and reduce the possibility of gelcoat blistering on moored boats, an epoxy barrier coating has been applied and the barrier coating covered with several coats of anti-fouling paint.
- Chemical content of bottom paints meets the required strict environmental standards.
- When moored, the boat does collect some marine growth on its hull bottom and this may result in visible scale rest assured that the boat is regularly cleaned, systems flushed and periodically waxed as well as placed into dry storage when not in the water.

#### Sacrificial Anodes (Zincs)



The boat is equipped with sacrificial anodes (zincs) to protect underwater metal parts from excessive deterioration. We check the zincs regularly and shall replace them if they have deteriorated more than 70%.

There are many factors that determine the rate at which zincs deteriorate, including:

- Water temperature
- Salinity
- Water pollution

Stray current from the boat or dock may cause complete deterioration in just a few weeks. If there is rapid zinc deterioration, we will measure the electrolytic corrosion around the docked boat with a Corrosion Test Meter. If the zincs are *not* bonded correctly, they *will not* provide protection and this is evident by there being no corrosion evidence on the anode.

We do have in spares, a replacement set of anodes.





# A DANGER! Carbon monoxide gas (CO) is colorless, odorless, tasteless, and extremely dangerous. All engines, generators, and fuel burning appliances produce CO as exhaust. Prolonged exposure to low concentrations or very quick exposure to high concentrations will cause BRAIN DAMAGE or DEATH. Teak surfing, dragging, or water skiing within 6 metres of a moving watercraft can be fatal as those towed are exposed to high concentrations of CO.

#### Facts about CO

- CO poisoning causes a significant number of boating deaths each year.
- Called the "silent killer", CO is an extremely toxic, colourless, odourless and tasteless gas.
- CO can harm or even kill you inside or outside the boat.
- CO can affect you whether you're underway, moored, or anchored.
- CO symptoms are similar to seasickness or alcohol intoxication.
- CO can make you sick in seconds. In high enough concentrations, even a few breaths can be fatal.
- Breathing CO blocks the ability of your blood to carry oxygen.
- The effects are cumulative, even low levels of exposure can result in injury or death.

#### Factors That Increase the Effects of CO Poisoning

- Aged
- Smokers or people exposed to high concentrations of cigarette smoke
- Consumption of alcohol
- Lung disorders (including Asthma)
- Heart problems
- Pregnancy





#### Where and How CO Can Accumulate

#### Stationary Conditions That Increase CO Accumulations Include:



#### To correct stationary situations A and/or B:

- Close all windows, portlights and hatches.
- If possible, move your boat away from source of CO.



#### Running Conditions That Increase CO Accumulations Include:



#### To correct running situations C and/or D:

- Trim the bow slightly down (don't over trim as this can lead to porpoising).
- *Open* windows, vents and clears on bimby.
- When possible, run boat so that prevailing winds help dissipate exhaust.

#### How to Protect Yourself and Others From CO

- Know where and how CO may accumulate in and around the boat (see above).
- Maintain fresh air circulation throughout the boat at *all* times.
- Know where the engine and bilge blower exhaust outlets are located and keep everyone away from these areas.
- *Never* sit on, or hang onto, the back deck or swim platform while the engine(s) are running.
- *Never* enter the areas under swim platforms where exhaust outlets are located.
- Although CO can be present without the smell of exhaust fumes, if exhaust fumes are detected on the boat, take *immediate* action to dissipate these fumes.
- Treat symptoms of seasickness as possible CO poisoning. Get the person into fresh air *immediately*. Seek medical attention.
- There is a CO alarm (12V powered) inside the boat cabin. *Do not* ignore any alarm.
- There is a CO alarm unit (battery) in the rear cockpit which also displays CO concentration.
- Follow the checklists provided on the next page.





#### Trip Checklist

- □ Make sure you know where the exhaust outlets are located on the boat.
- Educate *all* passengers about the symptoms of CO poisoning and where CO may accumulate.
- U When docked, or rafted with another boat, be aware of exhaust emissions from the other boat.
- Confirm that water flows from the exhaust outlet when the engines are started.
- Listen for any change in exhaust sound, which could indicate any exhaust component failure.
- Test the operation of the CO alarms by pressing the test button.

#### The Owner's Monthly Checklist

• We make sure *all* exhaust clamps are in place and secure.

 $\Box$  We look for exhaust leaking from exhaust system components. Signs include rust and/or black streaking, water leaks, or corroded or cracked fittings.

 $\Box$  We inspect rubber exhaust hoses for burned, cracked, or deteriorated sections. *All* rubber hoses should be pliable and free of kinks.

#### **Owner's Annual Checklist**

#### We have a Qualified BIA Marine Technician who:

- **□** Replaces exhaust hoses if cracking, charring, or deterioration has been found.
- We ensure that the engine is properly tuned, and well maintained.
- □ Each water pump impeller and the water pump housing is thoroughly inspected and replaced if worn. Making sure cooling systems are in working at capacity.
- □ *All* metallic exhaust components are inspected for cracking, rusting, leaking, or loosening. Making sure that all cylinder head gasket, exhaust manifold, water injection elbow, and the threaded adapter nipple between the manifold and the elbow are checked.
- □ The cooling water anti-siphon valve is checked for operation.

#### Carbon Monoxide Alarm System



## NOTICE

The CO monitor places a small, but constant drain on the battery. If the boat will be unattended for an extended amount of time, it must be plugged into shore power with the battery charger turned On, or switch in the solar array to main battery.

- The boat features a carbon monoxide (CO) alarm system in the cabin
- *Do not* disconnect the alarm system or shut off both batteries for the duration of your occupancy of the cabin.
- Read and understand the manufacturer's instructions for the CO alarm system.

#### More Information

For more information about how you can prevent carbon monoxide poisoning on recreational boats and other ways to boat more safely, contact:

#### MARINE RESCUE LAKE MACQUARIE:

Radio Base (02) 4971-3498 In emergency - VHF Ch.16 (the boat callsign is "HAVAREST")

OWNER Ian Childs Phone (02)9594-4477, (02)9570-3358, 0414-472-042 email: ian@childs.com.au

AMBULANCE, FIRE, POLICE: Phone "000" and contact Marine Rescue VHF Ch.16

**INTERNET:** 

The boat has limited Wireless Broadband using the 4G network. Contact the owner for guest access.

#### TV:

The boat has a 32" smart TV for FreeToAir as well as internet and videoconferencing.

an MS-Display Adapter and Mirascreen Adapter is fitted for projecting from your laptop, phone, etc. There is also a Nintendo Switch Games console with some games for entertainment.

When not charging from the engine, the batteries are topped up by solar panels attached to the bimby. When not on shore power, 240VAC is provided through a 1500W Inverter. This can power the TV and accessories plus individually the stove cooktop, or the microwave, or the airconditioner (currently not operational), or the water heater (currently not operational) - [These are NOT AND's!!!] Unless you bring your own selfcontained battery hair drier, only towel and fresh-air hair drying is available. No mains powered: hair-dryer, toaster, or coffee machines are permitted on the boat.

A 12V electric jug is provided for tea, coffee making, with tea bags and instant coffee. Linen and toiletry requirements are dependent on the number and age of occupants.

#### I love the descriptor of the power of the Lord God in Psalm 107:23~31 which reads:

"Those who go down to the sea in ships, Who do business on great waters;

**They have seen** the works of the LORD, and His wonders in the deep.

For He spoke and raised up a stormy wind, which lifted up the waves of the sea.

They went up toward the heavens [on the crest of the wave], they went down again to the

depths [of the watery trough]; Men's courage melted away in their misery.

They staggered and trembled like a drunkard, and were at their wits' end.

Then they **cried out to the LORD** in their trouble, and He brought them **out of their distresses**. He **hushed the storm** to a gentle whisper, So that the waves of the sea were still. [Mt 8:26] Then they were glad because of the calm, and He guided them to their desired haven (harbour). Let them give thanks to the LORD for His lovingkindness, and for His wonderful acts to these! So be sure to have a relationship with, and take the Lord with you, whenever you go on a boat...





WIF





## **Exterior Views**

#### Hull views



#### Deck Views







Helm





## **Component Locations**

**12 Volt Accessory Outlets:** Three at the helm, one in the galley (with Digital Voltmeter), one beside the galley/lounge, one in the berth (with USB charge outlet) and one at the rear cockpit lounge.

240 VAC Power double outlet: One at the galley at the side of the lounge, one in the cabin next to the microwave,

one in the cabin under the TV, One in the bed berth, one in the cockpit at the rear lounge.

240 VAC Changeover switch (shore power/inverter) at the entry to berth beside the power distribution switchboard

240 VAC Distribution Switchboard at the galley

Air Conditioner Seawater Pickup Seacock: In the engine compartment.

Air Conditioner Unit: In the deck compartment under the helm seat.

Auxilliary Battery Jack: the "anderson plug" beside the cockpit lounge - can connect back to the solar charger

and supply the inverter (which can also then keep the main batteries charged)

Batteries: On the port forward side of the engine compartment.

Battery Charger: In the engine compartment on the port forward wall.

Battery Switch 12VDC: In the deck compartment under the helm seat.

Note that it is a good idea when cruising and at anchor to use only one battery, thus if depleted - you can start using the other battery even when using the auxiliary battery for operation of the 240V Inverter.

Bilge pump - Aft: In the engine compartment.

Bilge pump - Forward: Under the entry steps.

Carbon Monoxide Detector: In the salon on the aft starboard wall and in the rear cockpit.

Chartplotter / Depth Sounder / Fish finder: At the helm station dashboard.

DC Circuit Breakers: At the helm under the dash panel and some beside the battery switch.

Depth Sounder Transducer: on the transom at rear.

Engine Circuit Breakers: On the engine.

Fire Suppression: 2x automatic fireballs in engine bay, 2.5kg AB(E) behind helm, 1kg AB(E) in cabin.

First Aid Kit - full class F kit under the forward lounge seat in the cabin

Fuel Fill: On the starboard aft deck.

Fuel Tank: In the engine compartment forward of engine.

**Inverter:** 1500W full sine wave (3KW peak) in the engine compartment atop the water heater on the Port side. Inverter ON remote switch in switch-cluster in cockpit Starboard side behind helm seat.

Inverter supply changeover: Main to Auxiliary battery feed - Port side cockpit lounge.

Macerator Underwater Discharge Seacock: In the engine compartment on the starboard side of the transom.

Marine Head Seawater Pickup Seacock: Under the cabin entry steps.

Navigation lights: Red and green lights at the bow. White all-around light at stern atop bimiby.

Smart TV (Samsung 32"): Cabin lounge.

Solar Charger: atop the inverter Port side in engine compartment.

Sound System (Fusion Stereo Radio): galley console.

Switch cluster for Flood lights and work lights + Cockpit ceiling and inverter on/off:

Transom Shower: On the port side of the cockpit.

Waste Holding Tank: In the engine compartment on the starboard side.

Water Fill: On the starboard aft corner of the deck.

Water Heater: In the engine compartment on the port side.

Water Pump: In the engine compartment on the port side.

Water Pump Switch: In the galley cabinet above the refrigerator.

Water Tank: In the engine compartment on the port side.





## Engine

The service packet contains detailed engine operation and maintenance manuals. Be aware of these, but they are for the owner's reference who has read and understood these manuals *before* starting or doing any maintenance on the engine. This is not something that our guests are to get involved with.

## **Engine Room Ventilation System**

FIRE/EXPLOSION HAZARD

• Use of the blower system is NOT A GUARANTEE that explosive fumes have been removed.

WARNING!

- If you smell fuel, DO NOT start the engine and DO NOT turn On any electrical devices.
- If you smell fuel and the engine is already running, *shut Off* the engine and turn *Off all* electrical devices. Investigate immediately.
- DO NOT obstruct or modify the ventilation system.



- The bilge blower removes explosive fuel fumes from the engine compartment.
- Fresh air is drawn into the compartment through the deck vents.
- The bilge blower switch is at the helm.

To make sure the engine compartment is ventilated with fresh air, run the bilge blower:

- For at least four minutes *before* starting the engine and an essential practice after refueling prior to starting
- During starting.
- Anytime the boat is running below cruising speed.



## **Fuel System**

## WARNING!

## FIRE/EXPLOSION HAZARD!

- It is very important that the fuel system be inspected thoroughly at each filling.
- For your safety and the safety of your passengers, the fueling instructions must be carefully followed.

#### 

Avoid the storage or handling of gear near the fuel lines, fittings and tank.





#### Fuel Fill and Vent

- The fuel fill fitting is marked "GAS" and on the starboard side at the stern.
- The boat fuel is only ULP 95 octane or higher.
- The fuel tank vent is located below the fuel fill.
- If you experience difficulty filling the fuel tank, check to see if the fuel fill hose or vent hose is kinked or collapsed.
- If there are no visible signs of a problem, contact Ian.

#### **Fuel Filters**

- The fuel pickup tube (located inside the fuel tank) is equipped with a fine mesh screen filter.
- In addition, when supplied by the engine manufacturer, a fuel filter is installed on the engine.
- The fuel filters are periodically replaced to make sure they remain clean and free of debris.

#### Anti-siphon Valve

## NOTICE

• If an engine running problem is diagnosed as fuel starvation, check the anti-siphon valve.

If the valve is stuck or clogged, change or replace it while the engine is *shut down*.

- NEVER run the engine with the anti-siphon valve removed, except in an *emergency*.
- This boat is equipped with an anti-siphon valve, which is an integral part of the fuel system.
- The valve is located at the point where the fuel feed line attaches to the fuel tank.
- The valve is spring loaded and is opened by fuel pump vacuum.
- This valve *will* prevent fuel from siphoning from the tank in the event of a fuel line rupture.





## Quick Oil Drain System



To drain the engine oil - This is informative and not something our guests will need to worry about:

- 1. Remove the boat from the water.
- 2. Unscrew the garboard drain plug.
- 3. Pull the draw cord until the oil drain plug and the oil drain hose slide out of the garboard drain.
- 4. Place the end of the oil drain hose into a suitable container.
- 5. Unscrew the oil drain plug and drain the engine oil.
- 6. Replace the oil drain plug.
- 7. Push the drain hose back into the bilge.
- 8. Replace the garboard drain plug.

We shall always dispose of all waste oil in accordance with the Environmental Protection Act & Regulations.





## Steering

- This boat features a power assisted rack-and-pinion steering system.
- The fluid level in the power steering reservoir is checked *every time the boat is used*.
- Boat steering is *not* self-centering.
   Remember the boat pivots at the bow and swings the stern (*opposite to a car*)
- The twin counter rotating propellers reduce wandering and leaning, however, at low speeds the boat will meander and require constant consistent correction, the smoother you do it the less yawing will occur.
- Use the fenders and the boat-hook when docking or in close quarters and the slower the better and learn how to dock using winds and tides to get a snug docking.

## Shift/Throttle

## WARNING!

#### LOSS OF CONTROL HAZARD!

Improper maintenance of shift/throttle hardware may cause a sudden loss of control!

- Carefully read and understand *all* of the information about the shift/throttle
- Also, read and understand the shifter/throttle and engine manual.

#### **Power Trim and Tilt**

- The stern drive on your boat is equipped with power trim and tilt.
- Trim and tilt instructions are provided in the engine operation manual and the shifter/throttle manual, included in the service packet.
- The aim is to have the boat run flat and true.
  - Too much bow up will stop the boat getting onto the plane (cruising speed) and will generate toxic fumes at the rear of the boat as the engine labours as well as increased fuel consumption.
  - Too much bow down and the boat will porpoise and become unstable.
  - o The boat has level sight-glasses at the helm to indicate trim and at planing speed, flat running is best.



# Herered

## Trim Tabs

## WARNING!

#### LOSS OF CONTROL HAZARD!

Improper use of trim tabs will cause loss of control!

- DO NOT allow anyone unfamiliar with trim tabs to use them.
- *DO NOT* use trim tabs in a following sea as they *will* cause broaching or other unsafe handling characteristics.
- DO NOT use trim tabs to compensate for excessive unequal weight distribution.



- The trim tabs may be used to *help* keep the boat level at cruising speeds.
- The trim tabs are controlled by two rocker switches at the helm.
- *Before* using the trim tabs read and understand the trim tab operation.

Observe the following:

• Once **cruising speed** is reached, **then and only then**, use the port or starboard trim tab switch (one at a time) to level the boat.

If you are not proficient with using trim tabs, please don't!

- Perform trim tab adjustment with several short touches to the switch rather than one long one.
- After each short touch allow several seconds for the hull to react.
- The trim tab hydraulic fluid reservoir is located in the engine compartment. The fluid level will be checked periodically (at least once a year) and is refilled as necessary.





## Chapter 5: Navigation & Communication Equipment

The service packet contains manuals for *all* navigation & communication equipment installed on the boat. Please read and understand the content of these manuals *before* using these systems for the first time and observe the following:

#### Gauges

#### **Cleaning Gauges**



#### Gauge Fogging

- Moisture may occasionally find its way into the gauges causing lens fogging.
- Turning on the gauge lights will help dry the lenses.
- Fogging *will not* harm the gauges.

#### Fuel Gauge

It is normal for the pointers on the fuel gauge to bounce as fuel sloshes back and forth in the fuel tank.

#### Cellular (mobile) phone

There are numerous cellphone towers around the Lake and you should have no difficulty using your mobile. We rely upon the cellular network for our wireless broadband hub.

#### **VHF** Radio

This boat includes a VHF (Very High Frequency) radio. The VHF radio can be used to access weather reports, summon assistance or contact other vessels as permitted

#### Radio Transmission Interference

VHF or other radio transmissions may cause brief erratic readings on tachometers. This *will not* damage these gauges or affect their accuracy when *not* transmitting.

#### Compass



## NOTICE

There is a magnetic boat compass mounted at the helm as required by regulations, and we suggest also use the compass in the Garmin Chartplotter and charts to navigate on the lake.

#### **Depth Finder**

## 🛕 WARNING!

- *DO NOT* use the depth finder as a navigational aid to prevent collision, grounding, boat damage or personal injury.
- When the boat is moving, submerged objects *will not* be seen until they are already under the boat.
- Bottom depths may change too quickly to allow time for the boat to react.
- If you suspect shallow water or submerged objects, run the boat at very slow speeds.
- Remember the leg down draft of the unloaded boat is 0.84m Suggest alert at any depth shallower than 1.5m!!

It is very necessary for the licensed boat driver to plan the journey and they are responsible for maintaining a lookout. Often there may be buoyant hazards on or just below the surface and it is up to the boat driver to avoid them.

This boat is quite fast and reasonably heavy. It has the potential to inflict considerable damage to any object with which it comes in contact as well as the damage to the boat itself and occupants. **So observe and avoid.** 

Some areas of the lake are relatively shallow and these are identified on the charts, (some shallows marked with yellow buoy) avoid these areas but always approach with extreme caution. Whist the Chart Plotter and depth sounder are helpful, remember it is reading from the stern and it is likely that a shoal can be overshot by the bow and not identified until you bottom.

If you wish to explore shallows, see the owner about including the inflatable tender.

Concessional buoys are marked on the chart and these allow casual and overnight mooring (24hr max). These are positioned in some ideal locations around the lake.

If already occupied, then you shall need to find another, or anchor up (and remember to run the anchor light all night and whist not required if on a designated mooring, still not a bad idea anyway).

Remember that the water tank is only 75L and the holding tank is only 75L. If you run out of fresh water, then if you use the water heater, it will blow the heater element (currently blown). The charts identify where you can refill the water-tank (you must use only our supplied food grade water fill hose), empty the sullage holding tank, and replenish the fuel (ULP95 or higher) at the end of any cruise.

Night time navigation requires that if you are moored other than at a registered mooring, then an anchor light must be on and visible 360deg between sundown and sunup.

If you are underway at night, you must have your navigation lights on and remember if you are traversing a registered swing mooring area, they are not required to display lights. So avoid where possible. The boat does have a forward facing lightbar flood/spotlight to assist in close quarters or to avoid hazards. Suggest keep cockpit lights off when underway to ensure night vision of skipper.





## **Bilge Pumps**

NOTICE

Discharge of oil, oil waste or fuel into navigable waters is prohibited by law. Violators are subject to legal action by the local authorities.



- This boat is equipped with two automatic impeller-type bilge pumps which are used to pump water out of the bilge.
- The bilge pumps are controlled by automatic bilge pump float switches (autofloat switches) and/or switches at the helm.
- The bilge pumps are wired directly to the battery so they *will* normally function even when the boat is completely shut down and left unattended.
- Still, some bilge water can accumulate and we always run any water out when we put the boat in the water (rain build-up)

#### Chapter 6: Plumbing

*Bilge Pump Testing* - this is done by the BIA registered Marine Mechanic engaged by the owner.

- Bilge pumps are critical to the safety of the boat.
- Check the bilge pumps often to make sure they are working.
- Individually test each pump as follows:
  - 1. Turn **On** bilge pump switch at helm.
  - 2. Make sure water in bilge is pumped overboard.
- If there is water in the bilge and the pump motor is running but *not* pumping inspect the discharge hose for a kink or collapsed area.
- If *no* problems are found, check the bilge pump housing for clogging debris as follows:
- 1. Remove power cartridge:
  - a. Lift tab while rotating fins counter-clockwise.
  - b. Lift out power cartridge.
  - c. Clear outer housing of debris.
- 2. Reinstall power cartridge:
  - a. Make sure "O" ring is properly seated.
  - b. Coat "O" ring with a light film of vegetable or mineral oil.
  - c. Align two cams on either side of power cartridge with two slots on outer housing and press power cartridge into housing while twisting clockwise.
- 3. Check reinstallation by trying to twist fins counter-clockwise without lifting tab; cartridge should stay in place.

## 22 www.lakemacquarie.boats

## Autofloat Switches

- Automatic bilge pumps use electromagnetic float (autofloat) switches to turn *On* the pump whenever water rises above a preset level in the bilge.
- One autofloat switch is mounted next to each automatic bilge pump.
- Autofloat switches are wired directly to the battery and *will* normally function even when the boat is completely shut down and left unattended.

Test the autofloat switches often as follows:

1. Push float switch test button up to turn *On* bilge pump.

If the pump does *not* turn *On*, check the inline fuse. If the fuse is good but the switch does not work, it may indicate a bad switch or possibly a low battery.

2. Push test button *all* the way down to return the float switch to auto mode.



## **CAUTION!**

When test is completed on each float switch, the test button *MUST* be pushed *ALL* the way *DOWN* to the auto position to return the switch to auto mode!









#### Seacocks

## **CAUTION!**

#### SYSTEM DAMAGE HAZARD!

- *Before* using a seawater pickup system, make sure that the system's seacock is in the *Open* position *before* the system is started and keep the seacock *Open* until the system is shut *Off*.
- *Close* the seacocks whenever the systems *will not* be used for long periods of time.

A seacock is a valve, controlled by a 90° lever, used to manage the pickup of seawater through the hull and below the water line. Seacocks are typically used on your boat in the following seawater pickup systems:

- Marine head (toilet)
- Air conditioning system (if equipped)

Before using any of these systems, make sure that the system's seacock is **Open** and remains **Open** until the system is shut **Off**.



#### Seawater Strainers

- Seawater strainers are used in water pickup systems to filter incoming seawater.
- A seawater strainer is located near each system's seacock.
- Check the strainers for leaks and/or debris *every time* you use your boat.
- If debris is found, clean the seawater strainer as follows:

## **CAUTION!**

#### FLOODING HAZARD!

- The seacock that sends seawater to the strainer *must* be *Closed before disassembling* the seawater strainer to prevent the boat from taking on water through the seawater strainer assembly.
- Keep the seacock *Closed* until the seawater strainer is completely reassembled.

#### SYSTEM DAMAGE HAZARD!

- After reassembling the seawater strainer, make sure that the seacock valve is *Open before* using the component/system.
- 1. Turn off the component or system (marine head, air conditioning system, etc.) that the strainer is connected to.
- 2. *Close* the seacock that sends seawater to the strainer you are about to clean. The seacock *must* remain *closed* until the strainer is completely reassembled.
- 3. Take apart the seawater strainer.
- 4. Remove the debris.
- 5. Flush the strainer with water.
- 6. Reassemble the seawater strainer.
- 7. Open the seacock and check for leaks around the strainer.
- 8. If no leaks are found, you may use the component or system.



## Freshwater System

## A WARNING!

- Only use safe drinking (potable) water in the boat's freshwater system.
- *Only* use a sanitary (food grade) drinking water hose to fill the water tank or connect to city water.
- Never use a common garden hose for drinking water.



- Read the information on the Freshwater System
- The boat is equipped with a pressure type (demand) freshwater (potable) system.
- This system can be pressurized by turning on the water pump.
- The water pump switch is located in the cabin on the side of the galley cabinet next to the lounge.
- Since the water pump requires DC power, the battery switch *must* be in the "1", "2" or "BOTH" position for the pump to work.
- Suggest pre-cruise flush with all outlets to remove air from pipes and any residual scale, etc.

Observe the following about the freshwater system:

- Turn *Off* the water pump to reduce water pressure and chance of leaks (when sleeping) when the boat is *not* in use or the water tank is empty.
- Inspect and clean the water filter often (located on the water pump).
- When the boat is to be left unattended for long periods of time, the water tank is pumped dry to prevent stored water from becoming stagnant and distasteful.





#### Freshwater System Winterisation - extended non-use

## CAUTION!

#### WATER SYSTEM DAMAGE HAZARD!

*Never* blow compressed air through the water system when *all* of the faucets are *Closed*.

- 1. Turn **On** the water system switch.
- 2. Open all of the faucets and showers and let the water system drain completely.
- 3. Turn *Off* the water system switch.

Any remaining water *must* be removed from the water lines. There are two ways to remove the remaining water from the lines:

- Compressed Air
- Gravity Draining

#### **Compressed Air**

You *must* have an air compressor with an air hose and an air nozzle.

- 1. Remove the water line from the outlet side of the water pump (opposite side from filter).
- 2. *Open* the faucet that is furthest away from the water pump.
- 3. Place the air nozzle against the end of the just removed water line and blow air through the system.
- 4. When water stops coming out of the *Open* faucet, stop the air and *Close* the faucet.
- 5. One at a time, repeat this process on *all* faucets and showers.

#### Gravity Draining

- 1. *Open all* faucets and showers.
- 2. Remove the drain plug from the tee fitting on the freshwater tank.
- 3. When the water has stopped draining from the freshwater tank, replace the drain plug.



#### **Transom Shower**

- The water pump switch *must* be turned *On before* using the transom shower (switch in galley next to lounge).
- Be sure to read the manufacturer's instructions.



#### Water Heater

## WARNING!

#### HOT HAZARD!

Water heated by the water heater can reach temperatures hot enough to scald the skin.

## **CAUTION!**

#### WATER HEATER DAMAGE HAZARD!

- *DO NOT* turn *On* the water heater electrical circuit on the AC panel until the water heater tank is *COMPLETELY* filled with water.
- Even momentary operation in a dry tank will damage the heating elements.
- Element damage may also disrupt the 240V supply and damage the inverter.
- The tank is full if water flows from the tap when the hot water is turned *On* in the galley.

## NOTICE

If the boat is connected to shore power or generator power, but the water heater is *not* working:

• Make sure the water heater circuit breaker on the AC panel is switched *On*.

If the circuit breaker on the AC panel is On, but the water heater is still not working:

- Consult with Ian (note the water heater is currently inoperative short circuit element and not to be used).
- The water heater is connected to the AC power system, therefore you *must* make sure that the water heater breaker on the AC panel is turned *On before* water *will* be heated.
- Read the manufacturer's instruction manual supplied in your owner's packet and observe the warnings above.

#### Winterising the Water Heater

- 1. Turn *Off* the water heater breaker.
- 2. Disconnect the hose (A) attached to the pressure relief valve (B).
- 3. If there is any water in this hose, drain it into the bilge or into a bucket.
- 4. *Open* the pressure relief valve (B).
- 5. *Open* the drain valve (C).
- Leave the pressure relief and drain valves *Open* until you fit out the boat after storage.





#### Deck Drains

- Water on the deck is drained overboard through the deck drains.
- Keep the deck drains free of debris.



#### Sink Drains

The sinks are above the waterline and are gravity drained overboard.

#### Shower Drains

- The shower is drained into a sump box.
- A float switch automatically turns *On* the sump pump.
- The sump pump pumps the shower water overboard.

#### Sump Box Cleaning

Periodically clean the sump box (A), filter, and pump as follows:

- 1. Remove the cover screws (B) and the cover (C).
- 2. Remove any debris from the box and the filter.
- 3. Clean the sump pump as outlined in the Bilge Pump section of this *Supplement*.

#### Sump System Winterisation

Drain the sump pump system in the winter months when *not* in use.

- 1. Disconnect and drain *all* lines to the unit.
- 2. Remove the screws from the mounting feet (D) and drain the system.
- 3. Reinstall the screws in the mounting feet and reconnect the system.



## Marine Head With Holding Tank



- Read the marine head operation and maintenance manual (included in your service packet).
- You must never put anything but human waste and approved/supplied toilet paper into the system.
- The holding tank is plumbed to a waste fitting on the deck for dock-side pump-out.
- Look at the side of the holding tank to check the content level.
- Empty the holding tank at every opportunity.

If you have used the toilet, we need to flush and empty it on vessel return to us. So tell us!!! If you don't desperately need to use the toilet, then **don't**.



#### Using The Marine Head

- 1. *Open* the head's seawater pickup valve (seacock).
- 2. *Before* using the head read and understand the instruction pictograph on the pump, **pump enough water into the bowl** to wet the sides.
- 3. After use, pump until the bowl is thoroughly cleaned. Continue pumping a few more times to clean the lines.
- 4. If excess waste causes the water to rise in the bowl, stop pumping until the water recedes.
- 5. Only human waste and supplied toilet paper (from the cabinet under the sink) are to be flushed.
- 6. On return to the dock, if anyone has used the toilet notify Ian, who shall arrange pump-out.





## NOTICE

Check with local authorities for regulations regarding the legal use of marine head systems. *It is forbidden to discharge sewer waste into enclosed waters.* 



#### To use the macerator to pump waste directly into the water (where regulations permit):

#### Forbidden in enclosed waters such as Lake Macquarie

- 1. *Open* the underwater discharge seacock.
- 2. Press both macerator switches at the same time to run the pump. *Do not* continue running the macerator if the waste holding tank is empty.
- 3. *Close* the underwater discharge seacock when you are done pumping.





#### Canvas



Insulated panels can be provided for the cockpit and cabin windows to make a very snug boat.



- 1. Slide the eye ends of the main bow (A) into the middle hinges (B) on the windshield frame and insert the pins.
- 2. Slide the eye ends of the aft legs (C) into the aft deck hinges (D) and insert the pins.
- 3. Unfold the canvas top (E) and slide the eye ends of the forward legs (F) into the forward deck hinges (G) on the windshield frame and insert the pins.
- 4. Zip the front curtain (H) and the side curtains (I) to the top (E) first and then snap the curtains to the windshield frame.
- No adjustments to the bow jaw slides (H) should need to be made as they are preset during manufacturing.
- *Before* trying to adjust the jawslide positions, obtain the correct measurements.





## **Cleats and Tow Eyes**



PERSONAL INJURY and /or PRODUCT or PROPERTY DAMAGE HAZARD!

• *NEVER* lift the boat using the bow and stern eyes or the cleats.

Carefully read the section on towing *before* towing anything behind the boat or having the boat towed by another vessel.





## NOTICE

An approved AB(E)-type fire extinguisher and fire blanket are in the galley area.

*All* appliances installed on this boat come with their own manuals. These manuals contain detailed instructions and important safeguards and these manuals may be referenced *before* using the boat's appliances.

• Make sure the AC breaker is turned **On** for the appliance you wish to use.

#### Refrigerator

Your boat features a dual voltage 240-volt AC/12-volt DC, refrigerator. The refrigerator runs on 12-volt DC power unless 240-volt AC power is being supplied by shore power or 240V Inverter *and* the refrigerator circuit breaker on the distribution switchboard is *On* (default is 12VDC)

#### **Electric / Spirit Stove**





## DANGER!

CARBON MONOXIDE POISONING HAZARD!

- DANGER CARBON MONOXIDE
- The alcohol stove is a source of dangerous carbon monoxide gas (CO).
- **BEFORE** using the alcohol stove, *Open* doors and windows to make sure there is enough fresh air for ventilation.

## WARNING!

- Open flame cooking appliances consume oxygen, this can cause asphyxiation or death.
- Maintain open ventilation.

## WARNING!

## BURN/SCALDING and/or FIRE HAZARD!

- Read the stove's instruction manual before using.
- *Always* check the AB(E)-type fire extinguisher in galley area.
- *Do not* use the stove while underway.
- Any non-cooking devices on or near your stove during use are potential fire hazards!
- *DO NOT* touch burners, grates or nearby surfaces as they may be hot even when they are dark in color. Areas near burners and grates may become hot enough to cause burns.
- During and after use, *do not* touch or let clothing or other flammable material come in contact with heated units or areas near the units (burner tops, main frame sides and back, sea rails and pot holders) until they have had sufficient time to cool.

## CAUTION!

#### PRODUCT DAMAGE HAZARD!

To prevent overheating which can destroy the electric burner elements, *NEVER* attempt to use both alcohol and electric burners simultaneously.

## Audio & Visual Equipment

## NOTICE

AM/FM radio and TV reception may be impaired anytime the engine is running.

There are also a Caride System which allows mobile phone integration (Android Auto)

ask if you wish to use the Nintendo Switch Console.





#### Dinette/V-Berth



The dinette table can be removed and the dinette area can be converted into a berth.

- 1. Remove the table (A) and the table leg (B).
- 2. Place the filler boards (C) so that they fit securely into the recessed edges (D) at the edge of the dinette seats.

Place the filler cushions (E) on top of the filler boards (C).
 Filler boards and filler cushions are usually stowed in the double berth compartment

## Remember - nothing wet ever in the berth area, on the mattress, etc.





#### **Care and Maintenance**

All of the lights installed on your boat are of top quality, but you should be aware that failure may periodically occur for a variety of reasons:

- 1. There may be a blown fuse or circuit breaker *replace the fuse or reset the breaker*.
- 2. The bulb may be burned out *as these are L.E.D. we don't carry spares*.
- 3. A wire may be damaged or may have come loose we shall repair as required.

#### **Navigation Lights**

CAUTION!

Avoid the storage of gear where it would block navigation lights from view.

#### **Interior & Exterior Lights**

## **CAUTION!**

- Be conservative in the use of battery power.
- Prolonged use of cabin and cockpit interior lights (overnight) *will* result in a drained battery.
- The light systems are all powered by the boat's 12 volt DC system.
- The battery switch must be in the 1, 2 or BOTH position for the lights to work.
- There are *On/Off* light switches for different sets of lights on the cabin wall.
- Some individual lights also have a switch on the light.
- Suggest when moored only use one battery and keep the other in reserve (to start the engine, etc) unless using the auxiliary battery, which you can plug into the anderson plug and selecting the inverter selector switch to Auxilliary ONLY.

When using the inverter from the auxiliary battery, this will not drain the main batteries and the 240V to 12VDC Charger would also keep the Main Batteries topped up.

Whichever battery is feeding, the turned on Inverter can be fed from the solar array whistever ther is sunlight available to do so.

The bimini solar array mounting rack has a forward facing light bar flood light as well as 2x worklights above the stern swim platform and in the centre rear - the anchor light. These are switched from the switch cluster behind the helm seat

The ceiling cockpit lights have a series switch in the cluster giving the option to turn off these ceiling lights





## Air Conditioning System

## CARBON MONOXIDE POISONING HAZARD!



Dangerous carbon monoxide gas (CO) can be brought into the boat through the air conditioning system.

## CAUTION!

#### SYSTEM DAMAGE HAZARD!

The air conditioning system's seacock *must* be *Opened before* turning *On* the air conditioner and *must* remain *Open* during use.

- The boat is equipped with an air conditioning system.
- Read the air conditioner manual *before* using the air conditioner system.
- **Before** using the air conditioner system, make sure the breakers on the AC main distribution panel are turned **On** and make sure the system's seawater pickup seacock is **open**.
- The seacock *must* remain *open* anytime the air conditioner is in use.
- Check the seawater pickup strainer for debris according to the directions given in the *Seawater Strainer* section of this *Supplement*.



Currently the Airconditioner can only be used when connected to 2x15A shorepower. So suggest **don't try it.** 





## Chapter 12: Electrical System

## **DANGER!**

#### EXTREME FIRE. SHOCK & EXPLOSION HAZARD!

- To minimize the risks of fire and explosion, NEVER install knife switches or other arcing • devices in the fuel compartments.
- NEVER substitute automotive parts for marine parts. Electrical, ignition and fuel system parts were designed and manufactured to comply with rules and regulations that minimize risks of fire and explosion.
- DO NOT modify the electrical systems or relevant drawings.
- Have qualified personnel install batteries and/or perform electrical system maintenance.
- Make sure that *all* battery switches are turned *Off before* performing any work in the engine spaces.

## WARNING!



- in 🖉 🖤 FIRE & EXPLOSION HAZARD! • Fuel fumes are heavier than air and will collect in the bilge areas where they can be accidently ignited.
- Visually and by smell (sniff test), check the engine and fuel compartments for fumes or accumulation of fuel.
- ALWAYS run the bilge blowers for at least four minutes prior to engine and/or generator starting, electrical system maintenance or activation of electrical devices.
- Minimize the danger of fire and explosion by *not* exposing the batteries to open flame or • sparks. NEVER smoke anywhere near the batteries. In fact do not smoke on this boat!

## **CAUTION!**

#### SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

NEVER disconnect the battery cables while the engine is running since it can cause damage to your boat's electrical system components.

## NOTICE

Electrical connections are prone to corrosion. To reduce corrosion caused electrical problems, keep all electrical connections clean and apply a spray-on protectant that is designed to protect connections from corrosion.

## 12-Volt DC System

#### Batteries

The batteries supply electricity for lights, accessories and engine starting.

#### Fuses and Circuit Breakers

- Fuses and circuit breakers for engines and main accessory power are on the DC main distribution panel and on the battery switch panel.
- Some equipment may have secondary fuse protection at the unit, behind the battery switch panel or at the batteries.
- Electronics power is provided at the helm station.

#### Battery Switch

- The battery switch has four (4) positions.
- Some "Standby Loads", such as the CO monitor, the automatic bilge pumps, and the stereo memory, are *not* affected by the battery switch since they are wired directly to the battery (see the *Wiring Diagrams* in this *Supplement* for more details).



BAYLINER

#### **Battery Switch Positions**

## NOTICE

Since the batteries on your boat were dealer-installed, the battery switch positions listed below may vary. Make sure you get a full explanation of battery switch use from your selling dealer.

Battery Switch Position	Engine Starting	Accessories and Lights	Engine Alternator	Battery Charger
POSITION <u>1</u>	Battery <u>1</u> Provides Starting Power	Battery <u>1</u> Provides Power for Accessories and Lights	Charges Battery <u>1</u>	Charges BOTH Batteries
POSITION 2	Battery <u>2</u> Provides Starting Power	Battery <u>2</u> Provides Power for Accessories and Lights	Charges Battery <u>2</u>	Charges BOTH Batteries
POSITION <u>BOTH</u>	<u>BOTH</u> Batteries Provide Starting Power	<u>BOTH</u> Batteries Provide Power for Accessories and Lights (not advised unless engine is running)	Charges <u>BOTH</u> Batteries	Batteries will NOT Charge Properly So only switch to BOTH when underway.



#### Alternator

The engine alternator *will* keep the batteries properly charged when running at cruising speeds and the charge is also supplemented with the solar charging system.

#### **Battery Charger**

#### CAUTION!

ENGINE & ELECTRICAL SYSTEM DAMAGE HAZARD!

**NEVER** run the boat's engine and the battery charger at the same time.

## CAUTION!

The battery charging systems (alternator and battery charger) installed on the boat are designed to charge lead-acid batteries only.

Thoroughly read and understand the battery charger manual (provided in your owner's packet) *before* using the battery charger for the first time.

- The battery charger *will* charge the boat's batteries whenever the boat is plugged into 240V/50Hz shore power and the "BATTERY CHARGER" AC breaker is *On*.
- The battery switch can be in any position during charging.
- You may use DC powered electrical systems, such as the lights and stereo when the battery charger is *On*, but there *will* be a corresponding drop in charger performance.

#### • IMPORTANT!

If you are not using an auxiliary battery to feed the inverter, but rather a main battery, you need to turn off the battery charger on the electrical 240VAC distribution switchboard as this battery will then be feeding itself and become depleted. It will still get charged from the solar. If the main battery is feeding the inverter, but the inverter will shut-off if the 240V battery charger circuit breaker is on.

#### 12-Volt Accessory Outlets

## **CAUTION!**

*DO NOT* use the 12-volt accessory outlet with a cigarette or cigar lighter. High temperatures may melt the outlet.

- The boat is equipped with a 12-volt accessory outlet at the helm in the galley beside the lounge, in the berth.
- There is a 12V digital voltmeter in the galley
- The outlets can be used with any 12-volt device which draws 15 amps or less.
- The 12-volt accessory outlets are protected by 15 amp circuit breakers on the main circuit breaker panel.
- Dedicated USB Chargers are located at the cockpit lounge and berth 12V outlet points

Note that the 2x USB charge points on the double 240V power outlet under the TV required 240V power to be on.



## 240-Volt AC System



## CAUTION!

#### WATER HEATER DAMAGE HAZARD!

- *DO NOT* turn *On* the water heater AC panel electrical circuit until the water heater tank is *COMPLETELY* filled with water.
- The tank is full if water flows from the tap when the hot water is turned *On* in the galley.
- Even momentary operation in a dry tank will damage the heating elements.



## NOTICE

When using shore power the simultaneous use of several AC components can result in an overloaded circuit. It may be necessary to turn *Off* one or more accessories in order to use another accessory.

- The 240V/50Hz AC system can be energized only when on dual 15A shore power.
- The master circuit breakers, located on the 240VAC Distribution Switchboard, provide power source selections to the AC powered accessories.
- Individual breakers *must* be turned *On* to supply power to the accessories you wish to use. We suggest if you aren't using it - leave it off (Airconditioner, water heater, etc).
- A 240VAC Power Monitor Display is in the galley it shows voltage (Power1 or Power2 switch), current draw (Amps), kW, kWh, and Power Factor





## DANGER!

# FIRE, EXPLOSION & SHOCK HAZARD!

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- DO NOT alter shore power connectors and use only compatible connectors.
- *Before* plugging in or unplugging the shore power cord to your boat, make sure *all* breakers and switches on the AC master panel are turned *Off*.
- To prevent shock or injury from an accidental dropping of the "hot" cord into the water, *ALWAYS* plug the shore power cord to the boat inlet first; then to the dockside outlet. When unplugging from shore power, unplug the shore power cord from the dockside outlet first.
- *NEVER* leave a shore power cord plugged in to the dockside outlet only.
- Only use shore power cords approved for marine use. *NEVER* use ordinary indoor or outdoor extension cords that are *not* rated for marine use.

## WARNING!

#### ⚠️ SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

- Monitor the polarity indicator lights *EVERY TIME* you connect to shore power.
- If a reversed polarity light turns *On* when you are connecting to shore power, *DO NOT* turn on the main breaker switches.
- Instead, *IMMEDIATELY* unplug the shore power cord (*ALWAYS* from the dockside outlet first) and alert marina management.

## WARNING!

## SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

- Periodically check the shore power cord(s) for deterioration or damage.
- NEVER use damaged or faulty cords since the danger of fire and electrical shock exists.
- DO NOT pinch shore power cords in doors or hatches, or coil the shore power cord too tightly since these situations can generate enough heat to result in a fire.
- If a shore power cord accidently becomes immersed in water, *THOROUGHLY* dry the blades and contact slots *before* reusing. We conduct portable appliance testing to AS/NZS 3760 for all 240VAC appliances and chords.





BAULINER

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#### 2 ELECTRICAL SYSTEM DAMAGE HAZARD!

- Using several AC components at the same time can result in an overloaded circuit. You may have to turn *Off* one or more components in order to use another accessory.
- Use double insulated or three-wire protected electrical appliances whenever possible.

## NOTICE

- Some dockside installations may be rated less than 15 amps, therefore, whenever a lower amp adapter is used, however, there *will* be a corresponding drop in supplied power from the dockside system.
- The single shore power 240V/50Hz, AC system features one, 240V/15 amp, shore power receptacle.
- As the boat is equipped with an air conditioning system, a second (dual) 15 amp inlet has been installed and where a second 15A supply is not provided, then the Airconditioning is not to be used.
- The dual shore power inlets are labeled "LINE 1" and "LINE 2", which corresponds to the "LINE 1" and "LINE 2" master breakers on the AC panel.
- The dual shore power system is designed so that each line is independent of the other except when the AC power transfer switch is used (on the power distribution panel in the galley) which is only to be used when supply is from a single 240VAC power source.
- When using Inverter power, make sure that you switch both the Line 1 and Line 2 input breakers to on (usually switched to parallel when on single feed shorepower at the marina dock or dry-berth) as the inverter uses dual feeds of 750W each with 1.5kW each initial peak (*not enough to kick off airconditioner or water heater*).





#### Connecting To Shore Power



Note: Inverter Supply Changeover switch must be changed to shorepower whenever supplied by shorepower supply and inverter turned off.







BAULINER

- 1. Review *all* hazard information at the beginning of this section, *Shore Power*.
- 2. Turn off all breakers and switches on the AC master panel.
- 3. Attach the shore power cord to the boat inlet first then to the dockside outlet.
- 4. Use the 240V changeover switch to change from Shore Power to Inverter Power (Centre is OFF)
- 5. If using Inverter Power switch on the inverter on the cluster switch in the cockpit and use the inverter battery source changeover next to the cockpit lounge to select Auxiliary or Main Battery feed.
- 6. Monitor the AC panel's polarity indicator lights, located below the line master breaker(s), as follows:
  - An indicator light illuminating after the power cord is plugged into the dockside outlet indicates acceptable electrical power. You may turn *On* the master breaker switch.
  - A light, indicating reversed polarity, needs to be checked as this could cause electrical system damage and possibly electrical shock injuries. In this case, *do not* turn *On* the master breaker switch.
- 7. Switch the "LINE 1 DOCKSIDE MASTER" *On*.
- 8. Where equipped with dual dockside, switch the "LINE 2 DOCKSIDE MASTER" On.
- 9. Turn **On** the individual component breakers as required (not water heater of airconditioner).
- 10. When using Inverter for 240VAC Switch both the LINE 1 and LINE 2 to **On**.

#### Transf<u>er Switch</u>

## NOTICE

- When using the "Transfer Switch on the 240V switchboard "*do not* exceed 15 total amps" (check on power use analyser display).
- The amperage of each component breaker is shown in figure 1.

When only one dockside outlet is available, you can use the "Transfer Switch" to provide power to both lines.

- 1. Connect to shore power as described in steps 1 through 4 above.
- 2. Switch the "LINE 1 TRANSFER SWITCH" (transfers power from line 1 to line 2) *On* instead of the "LINE 2 DOCKSIDE MASTER. but change Line 1 Transfer Switch to *OFF* when on inverter.
- 3. Turn *On* the individual component breakers as required. If you don't use it leave it off (Air Conditioner, Water Heater, etc.)





#### Deck Electrical Harness



#### Hull Electrical Harness











#### Battery System











## Wire Diagrams

**Dual Dockside** 









Chapter 12: Electrical System





		ph. (02)9594-4477	mob. 0414-472-042	
	Name Of Owner			
PO Box 115	Boolaroo NSW 2284			
	Address			
ian@childs.	.com.au	Chartplotter		
	E-mail	•		
		Garmin		
Alex Childs	/ 0413-416-811 Alternate Manager / mobile phone	Manufacturer	Model Name/Number	
Paul Childs	/ 0490-505-573	O said blood as		
	Alternate Manager / makila where a	Jen		
	Alternate Manager / mobile phone			
Engine	Alternate Manager / mobile phone			
Engine Mercury Marine	MCM 5.7 LITRE	Euel Cruising Sp	eed 20knots = 371 /hr	
<b>ngine</b> Mercury Marine Manufacturer	MCM 5.7 LITRE Model Name/Number	Fuel Cruising Spe al	eed 20knots = 37L/hr bout 35knots = 60L/hr	
Engine Mercury Marine Manufacturer	MCM 5.7 LITRE Model Name/Number	Fuel Cruising Spe al Towing the banan	eed 20knots = 37L/hr bout 35knots = 60L/hr a at 15knots = 60L/hr	
Engine Mercury Marine Manufacturer	MCM 5.7 LITRE Model Name/Number	Fuel Cruising Spe al Towing the banan	eed 20knots = 37L/hr bout 35knots = 60L/hr a at 15knots = 60L/hr	
Mercury Marine Manufacturer 25W-40 Marine	MCM 5.7 LITRE Model Name/Number Engine Serial Number 5.5L	Fuel Cruising Spe al Towing the banan	eed 20knots = 37L/hr bout 35knots = 60L/hr a at 15knots = 60L/hr	

#### Propeller

Manufacturer

Model Number

#### Ancilliaries

Aqua Craft 2.5m inflatable tender with paddles (MinnKota 42lb thrust electric outboard optional)

Pitch

3-person tow banana boat ride-on (with tow rope)

or if you want exercise and are a competent rower, there is the single scull (by appointment).







## **Float Plan**

Before going boating, fill out a copy of this float plan (or similar) and leave it with a *reliable* person whom you can depend on to contact the Marine Rescue or other the authorities, if you do not return as scheduled.

Description of Boat			Persons on Board		
AFP937	n Hav	arest			
Re	egistration/Documentation Nun	nber		Full Name	
7.3m	Bayliner 245SE	3 Express Cruiser	Age	Health	Phone Number
۰ ۱۸/۱- :+ -	- -		5		
VVNITE Hull Color	Da	Trim Color			
242 Litres		One Number of Engines		Full Name	
<u>3x Solar par</u>	nels on blue bimby	<u>/ top over cockpit</u>	Age	Health	Phone Number
	Distinguishing Features				
	Distinguishing Features			Full Name	
			Age	Health	Phone Number
Operator o	f Boat				
•				Full Name	
	Full Name		Age	Health	Phone Number
Male or Female	Age	Health			
				Full Name	
	Address				
			Age	Health	Phone Number
	Address				
	Phone/ E-mail			Full Name	
	Operator's Boat License N	Number	Age	Health	Phone Number
You must provid	e and have a current NSW	Boat License and			

NO BOAT LICENSE = NO KEY!

or

We need to supply a skipper





## Survival Equipment

Yes	Uniden UM355	VHF	Booragal (Awaba House Jetty)	NSW 2284
Marine Radio (Yes/No)	Туре	Frequencies	Departi	ng From
Booked adult persons	Flares (Yes/No)	Mirror (yes or no)	Departure Date	Departure Time
Smoke Signals (Yes/No)	Yes Flashlight (Yes/No)	Food (Yes/No)		
Voo	No o		Stope	over 1
Water (Yes/No)	<u>Y ES</u> Anchor (Yes/No)	<u>(optional)</u> Raft/Dinghy (Yes/No)		
Optional (with dingy)			Arrive No Later Than: Date	Arrive No Later Than: Time
Paddles (Yes/No)	EPIRB (Yes/No)	Other		
Other	Other	Other	Stope	over 2
			Arrive No Later Than: Date	Arrive No Later Than: Time
Vahicla Das	cription (quest c	ar)		
Venicie Des			Stope	over 3
Make		Model		
			Arrive no later Than: Date	Arrive no Later Than: Time
Colour	Re	gistration Number		
Whe	re is the Vehicle Parked on de	eparture?	Stope	over 4
			Arrive No Later Than: Date	Arrive No Later Than: Time
			Stope	over 5
			Arrive No Later Than: Date	Arrive No Later Than: Time
			Stope	over 6
			Arrive No Later Than: Date	Arrive No Later Than: Time
			Final Destination Port (If	Different Than Home Port)
			Arrive No Later Than: Date	Arrive No Later Than: Time
			If not returned by the date call the Marine Rescue.	e and time listed above,
			02 497  -	3498
			Phone Number	88
			VHF Channel	27MHz Channel

**Trip Expectations** 

## Notes



Lake Macquarie is twice as large as Sydney Harbour and one of the largest salt water lagoons in the

Southern Hemisphere. It has inflows primarily from Cockle Creek and Dora Creek with a catchment area of 604.4km<sup>2</sup> At

the Northern End of the Lake we have Speers Point Park (one of the best recreational parks for children around),

Warners Bay shops and eateries across the way. We have Awaba House Park and our home base at Marmong Point,

Then head South around Bolton Point and you'll come to Toronto (the Royal Motor Yatch Club is there).

Then head down and around Coal Point to the Rathmines Catalina Park (historic flying boat base), then on to

Wangi-Wangi which is East of the Swansea channel entry (we don't recommend getting in too close to Belmont South

due to the shallows there, but Marks Point Marina can supply fuel (Premium Unleaded only) if a top-up is needed.

Pulbah Island sits South of Wangi-Wangi and Swansea and is a National Park, Bushwalking and picnicing is permitted

however camping on the island is not. There are a couple of 24hr courtesy moorings if you wish to hook up and spend the night.

South of Pulba we have the communities of Cams Wharf and opposite Gwandolan (the bowling Club is good for meals) back North and around Point Wolstoncroft (State Recreational area and camp) and back South to Summerland Point, Mannering Park, Wyee Point and Morriset, then round to Bonnells Bay. You may wish to Navigate up Dora Creek to Wangi Read, then some back out and back back around Wangi Mangi for the journey, back to Marmong Paint.

Wangi Road, then come back out and head back around Wangi Wangi for the journey back to Marmong Point.

Fishing in the Lake abounds with mulloway, bream, dusky flathead, tailor, squid, luderick, sand whiting, yellowtail, kingfish and Australian salmon (see Service NSW if you don't have a Fishing License as one is required).

We can make available our 3-person recreational tow banana boat (max tow speed 15knots) - It's a load of fun but remember an observer over the age of 16 is required to monitor and notify the skipper.

also remember that towing it shall use-up significant fuel compared to the unencumbered cruising 37L/hr (expect upward of 60L/hr)

For those who wish to explore, (anchor or hook-up to a courtesy mooring) we can make available the

2.5m inflatable dingy and paddle/oars with optional MinnKota 42lb thrust electric outboard with 44AH battery. There is also a 380W solar array which is more than able to keep the battery replenished in sunlight

We will supply a quantity of adult Large & Medium size PFD's - Childrens PFD's will need to be provided by yourself

NOTE: No wet/damp articles on the sleeping berth (only dry)!



We can supply liquid soap, shampoo, conditioner, but not face washers, towels.

Linen can be available for the double berth only. Should additional be required, bring sleeping bags, pillows, etc.

There is no coffee machine, hair drier or toaster and don't bother bringing these as they are forbidden.

In lieu of a hair drier, we can provide a microfibre towel

There is an electric jug (12V) with instant coffee, tea bags sweetener/sugar plus long life milk.

# LIFE JACKETS ON BOARD

	Brand	Size	Kg Range	Other
1	Menace	Child	10~25kg	85 chest
2	Menace	Child	10~25kg	85 chest
3	Marlin Dominator	Junior	33~40kg	
4	Savage Fluid	S	40~60kg	
5	Savage Fluid	S	40~60kg	
6	Marlin Medalist	М	60~70kg	
7	Ultra Kayak	L	60+kg	
8	Ultra Kayak	XL	60+kg	
9	Ultra Kayak	XL	60+kg	

## Notes



Havarert





# **Mooring Buoy colours:**

Private Mooring	Yellow
Commercial Mooring	Orange
Club Mooring	Red
Emergency Police, etc.	Blue
Public Courtesy Moorings max 24hr	Pink

Check the waterways local charts for mooring locations

LakeMacquarie.boats

liverox	Notes

Notes	Herered



The darker the blue, the less likely to get stuck in the gew!





