

OWNER'S MANUAL

MAVERICK
440
CUSTOM



ZA-MAV44027A323

MANUFACTURED BY

MAVERICK YACHTS (PTY) LTD

CAPE TOWN - SOUTH AFRICA

MAVERICK YACHTS

MAVERICK 440

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DANGER, WARNING, CAUTION, NOTE

These warnings appear in the text of the Owner's Manual and it is the Owner/Operator's responsibility to read and understand these.

DANGER	- Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
WARNING	- Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	- Warns against practises, which are unsafe or could result in damage to equipment.
NOTE	- A technical requirement to which the operator of the equipment must pay particular attention.

MAVERICK YACHTS

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INTRODUCTION

- READ THIS OWNER'S MANUAL CAREFULLY BEFORE YOU GO SAILING AND REFER TO IT FREQUENTLY DURING YOUR OWNERSHIP.
- PLEASE ENSURE THAT THIS MANUAL IS TRANSFERRED TO SUBSEQUENT OWNERS.
- While all the information contained herein is important, items of special importance to you are shown in CAPITALS.
- If your experience in sailing or yacht ownership is limited you are strongly advised to take instruction from a professional, registered sailing institution.
- This owner's manual is written in conformance with the European Recreation Craft 2013/53/EU and the notified body is the **International Marine Certification Institute**.
 - Address: Rue Abbe Cuypers 3, B-1040 BRUXELLES, BELGIQUE
 - Telephone: + 32-2-741-6836 Fax: + 32-2-741-2418

This manual has been compiled to help you to operate your craft with safety and pleasure. It contains details of the vessel; the equipment supplied or fitted its systems, operational information and maintenance.

This manual forms part of the Technical Construction File as required for certification in compliance with EC Directive 2013/53/EU.

MAVERICK YACHTS

MAVERICK 440

ISSUE SHEET

HULL IDENTIFICATION NUMBER: ZA-MAV44027A323

THIS DOCUMENT IS ISSUED BY MAVERICK YACHTS, CAPE TOWN, SOUTH AFRICA.

DATE:

RECEIVED:

FIRST OWNER

SUBSEQUENT CHANGES OF OWNERSHIP

HANDED OVER BY

RECEIVED BY

1

SELLER

.....

DATE

.....

PURCHASER

.....

DATE

2

SELLER

.....

DATE

.....

PURCHASER

.....

DATE

MAVERICK YACHTS

MAVERICK 440

STANDARD WARRANTY POLICY

MAVERICK 440 hull no ZA-MAV44027A323

The builder provides the following warranties in respect of the Yacht.

1. The Yacht shall be constructed in accordance with good manufacturing practice.
2. The Yacht, its design, manufacture, material and equipment, is compliant with the European Union Recreational Craft Directive in each and every respect and reflects the relevant markings to show such compliance on a Seller's plate attached to the Yacht as envisaged by the said Directive. Pursuant thereto the Seller shall procure that the Yacht is assessed for the applicable design categories against the aforesaid Recreational Craft Directive and an unconditional Declaration of Conformity is provided.
3. The Yacht shall be free from structural defects in material and workmanship, on structural bulkheads, keel as well as the hull and deck joints for a period of two (2) years from date of delivery.
4. The Yacht shall be constructed from materials of the highest quality reasonably available to the Seller.
5. Whilst the Seller takes the utmost care to ensure that equipment not manufactured by the Seller fitted to or supplied with the Yacht is of the highest quality reasonably available to the Seller and reasonably suitable for its purpose. The Seller gives no warranty or undertakings in relation to the quality of manufacture and/or suitability of such equipment, parts or components not manufactured by the Seller nor that such equipment, parts or components shall be fit for their intended purpose and the Seller shall have no liability (including liability for consequential losses) arising from any defect in such equipment, parts or components save as may arise by reason of the negligent or intentional acts of the Seller.
6. The Seller shall on request provide contact details of the manufacturers of the equipment, parts or components and shall assist and co-operate with the Purchaser to procure the assignment by manufacturers to the Purchaser of any

warranties or guarantees relating to the equipment, parts or components, but shall not be liable for the dismantling, fitment or refitting of the above said.

7. The Seller shall at its expense and within a reasonable period of time repair any defects in the Yacht arising from defective raw material utilised by the Seller or from faulty workmanship on the part of the Seller, provided always that such defect arises and is detected within 24 (twenty four) months of the Date of Launch and provided that the Seller is given notice of such defect in writing within 14 (fourteen) days of such defect being detected.
8. The Seller shall in its sole discretion be entitled to repair or make good any defect covered under this warranty itself or to employ or appoint any other person, company or firm to do so on its behalf. The Seller shall, within reason, schedule such repairs at the Purchaser's convenience.
9. In the event that the Seller repairs any defect covered under this warranty the Purchaser shall be liable to present at its own expense the transport of the Yacht to the premises mutually agreed by the Seller and Purchaser for the repair.
10. This warranty does not extend to any defects, faults, deterioration or damage arising:
 - 10.1 From fault or neglect on the part of the Purchaser or of third parties.
 - 10.2 From any repairs, alterations or modifications effected by the Purchaser or by third parties not authorised in writing by the Seller.
 - 10.3 The Seller is not responsible for design faults in the Yacht if he did not design it himself. Nor is the Seller responsible for the effectiveness and quality of materials and tackle ordered or supplied by the Purchaser.
 - 10.4 The Seller is not responsible for defects which have occurred after delivery of the Yacht due to ordinary wear and tear, improper use or carelessness or are the result of alterations made by the Purchaser or third parties. Nor is the Seller responsible for any damage resulting from the above defects.
11. Emergency repairs are not covered by the guarantee.
12. The warranty applies to the construction of the Yacht; the Seller is not responsible for consequential damages or indirect costs.
13. The Yacht shall be free from any gel coat osmotic blistering defect on underwater surfaces of the hull of the Yacht provided always that such defect arises and is detected within 2 (two) years of delivery of the Yacht to the Purchaser ("Date at Launch") and provided that the Seller is given notice of

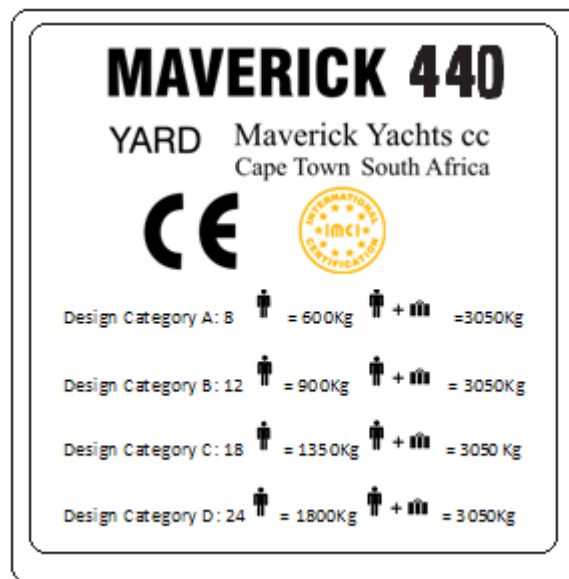
such defect in writing within 14 (fourteen) days of such defect being detected and provided that repairs or alterations to the Yacht is not conducted by any person not approved in advance in writing by the Seller, and provided that the cause of the osmotic blistering is manufacturers defect and not related to Purchases neglect to timely repair accident damages to the hull.

MAVERICK YACHTS

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BUILDER'S PLATE

The Builder's Plate is attached at the main Switch Panel. The Plate contains the following information:



YARD – Maverick Yachts

DESIGN CATEGORY – A (OCEAN)

This boat is designed for extended voyages where conditions may exceed wind force 8 (Beaufort scale) and significant wave heights of 4m and above but excluding abnormal conditions, and vessels largely self-sufficient.

DANGER

MAXIMUM PEOPLE – 8 (600 kg)

DANGER

MAXIMUM LOAD – 3050 KG (INCLUDES FUEL AND WATER)

CE – INDICATES COMPLIANCE WITH RECREATIONAL CRAFT DIRECTIVE 2013/53/EU.

MAVERICK YACHTS

MAVERICK 440

CRAFT IDENTIFICATION NUMBER (CIN)

The MAVERICK 440 CIN ZA-MAV44027A323

is permanently marked on the boat in the following two places:

1. On the starboard side edge of the transom steps.
2. On the inside of the electrical panel cabinet at the nav station.

It contains the following information:

ZA Country of manufacture is South Africa

MAV Manufacturing Yard, Maverick Yachts

440 Model is Maverick 440

27 Serial number (hull number)

A Month of Launch is January (refer ISO 10087 for sequence)

1 Production Year is 2023


21 Model Year is 2023

MAVERICK YACHTS

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WARNING SYMBOLS ON BOARD

The following Symbols will be found on board:

	BEWARE OF CAPSIZE
	WARNING
	ELECTRICAL SHOCK HAZARD
	FIRE HAZARD
	READ MANUAL
	FIRE EXTINGUISHER
	MANUAL CONTROL OF FIXED FIRE EXTINGUISHING SYSTEM
	NO SMOKING
	FLAMMABLE LIQUIDS
	ESCAPE HATCH
	FIRE ESCAPE ROUTE
	DIRECTION TO ESCAPE

MAVERICK YACHTS

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LOAD CALCULATION



WARNING

The following weights have been used in the design, calculations and stability in accordance with ISO 14946. These are to be considered as the maximum as per the different categories.

LOAD	CAT A	CAT B	CAT C	CAT D
	Kg	Kg	Kg	Kg
CREW	600	900	1350	1800
FUEL	800	600	400	200
WATER	900	675	450	225
STORES AND CARGO	410	515	460	405
CONSUMABLE LIQUIDS	150	150	150	150
LIFE RAFT AND DINGHY	190	210	240	270
TOTAL LOAD	3050	3050	3050	3050

MAVERICK YACHTS**MAVERICK 440****GENERAL INFORMATION**

<u>Dimensions, Displacements and Capacities</u>	<u>Imperial Measurements</u>	<u>Metric Measurements</u>
Length overall	(43'6")	13.3 m
Length waterline	(40'3")	12.3 m
Beam maximum	(24'5")	7.45 m
Draft (lightship)	(3'2")	1 m
Sinkage rate	(1490lbs/in)	266 kg/cm
Mast height above W.L.	(65.9")	20.1 m
Displacement (light ship)	(21'892 lbs)	9'930 kg
Displacement (half load)	(25'353 lbs)	11'500 kg
Displacement (full load)	(28'836lbs)	13'080 kg
Load carrying capacity	(6'724 lbs)	3050 kg
J	(14'04")	4.280 m
I	(52.38")	15.958 m
E	(18'23")	5.558 m
P	(51.82")	15.795 m
Mainsail area	(678.12 ft ²)	63.00 m ²
Genoa area	(406.87 ft ²)	37.80 m ²
Asymmetric spinnaker area		
Screecher	(975.74 ft ²)	90.65 m ²
Fresh water capacity	(264 USG)	1000 L
Fuel capacity	(211 USG)	800 L
Holding tank capacity	(21 USG & 79 USG)	80L & 300L
LPG tank	(2 x 19 lbs)	2 x 9kg
Voltage DC	24 V	24 V
Voltage AC	110V	60 Hz
Battery capacity – House Batteries	5 x 24V x 200Ah	LiFePO4
Battery capacity – Engine Batteries	2 x 12V x 100Ah	Lead Calcium
Yanmar	2 X	4JH57
Port Engine Serial No	E22845	SD 30099710
Stbd Engine Serial No	E22938	SD 30099711
Engine max power	2 x 57 hp	2 x 33kW
At RPM	3000 rpm	
Propeller dimensions	18" x 15" 3 bladed	Gori Overdrive
Boat number	#027	
Boat CIN CODE	ZA-MAV44027A323	

MAVERICK YACHTS

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GENERAL ARRANGEMENT AND LAYOUT DRAWINGS

1. SIDE PROFILE

The SIDE PROFILE drawing provides the operator a useful reference of major underwater and deck components.



Deck equipment	Through-hull fittings
<ol style="list-style-type: none">1. Push pit with seat2. Pull pit with seat3. Gas barbeque system4. Guard wires5. Toe-rail6. Main-shroud chain plate7. Bimini support8. Windscreen9. Hull windows10. Opening ports 60 x 20 cm11. Opening ports 32 x 20 cm12. Passarel13. Boarding ladder14. Bimini top15. Bimini side canvas16. Dinghy davits17. Mooring cleats bow18. Mooring cleat stern19. Mooring cleat amidships20. Rubber fender	<ol style="list-style-type: none">21. Log22. Depth sounder23. Heads intake24. Heads outlet25. Salt-water intake26. Engine cooling intake27. Exhaust outlet <p>Appendages</p> <ol style="list-style-type: none">28. Deep keel or29. Shallow keel / leeboard30. Engine sail-drive leg31. Sacrificial anodes32. Rudder shaft <p>Sails & Rigging</p> <ol style="list-style-type: none">33. Mainsheet system34. Mainsail with stack-pack35. Storm sail36. Roller-furler Genoa37. Roller-furler screecher38. Asymmetrical with snuffer

2. DECK ARRANGEMENT

The DECK ARRANGEMENT drawing identifies major deck components including.



Winches and Sailing Equipment

1. Primary winch (opt. electric)
2. Secondary winch
3. Dinghy/roller-furler winch
4. Mast collar (fabr. Alloy)
5. Foot block
6. Flush Wichard pad eye
7. Turning blocks (triple)
8. Mainsheet system
9. Genoa track
10. Roller furler
11. Main shroud chain plate
12. Baby stay chain plate

Hatches & Vents

13. 62x62cm hatch
14. 50x50cm hatch
15. 45x32cm hatch
16. 42x20cm port
17. 60x20cm port
18. Engine Vent
19. Galley vent

Safety Equipment

20. Life Raft storage
21. Pulpit
22. Push pit
23. Navigation Lights
24. Swim Ladder
25. Toe rail
26. Cleat - 9" alloy
27. Foredeck steps
28. Laminated glass panel
29. Curved laminated window
30. Straight laminated windscreen

Equipment

31. Universal equipment socket
32. Helmsman's chair (fabr. SS)
33. Lockers and Hatches
34. Fuel Fillers
35. Black Water Pump out
36. Shore Power Sockets
37. Deck Wash points
38. Deck shower
39. Shore power fitting
40. Rudder bearing
41. Engine vent
42. Shower
43. Grey-water extract fitting
44. Fresh water filler
45. Mainsheet / Genoa foot block

Cockpit

46. Aft locker
47. Helmsman's seat
48. Cocktail table
49. Deck shower
50. Aft lounge
51. Passerel
52. Boarding ladder
53. Universal socket
54. Cockpit hatch
55. Teak grating over cockpit sump

3. INTERIOR ARRANGEMENT – BRIDGE DECK

The INTERIOR ACCOMMODATION drawing identifies:



Saloon

1. Day berth (double)
2. Double Settee
3. Coffee table (converts to dining)
4. Escape hatch
5. Book shelf
6. Arm-rest / shelf

Galley

7. 3 burner gas cooker
8. Pot-drawer under
9. Extractor hood
10. Utensil drawer
11. Larder unit
12. Spice shelf
13. Gash bin
14. Dishwasher (opt)
15. Washer/dryer (opt)
16. Large item stowage
17. Crockery
18. Appliance shelf
19. Double sink
20. Cleaning materials under
21. Cutlery drawer
22. Napery

Entertainment

23. Day fridge/freezer (opt)
24. Prep area
25. Prep bowl with macerator
26. Filtered water tap
27. Dry-goods cupboard
28. Espresso machine (opt)
29. Microwave (opt)
30. Drinks cupboard
31. Glasses
32. 90l freezer
33. 90l fridge
34. Breakfast counter
35. Air conditioner vent (opt)

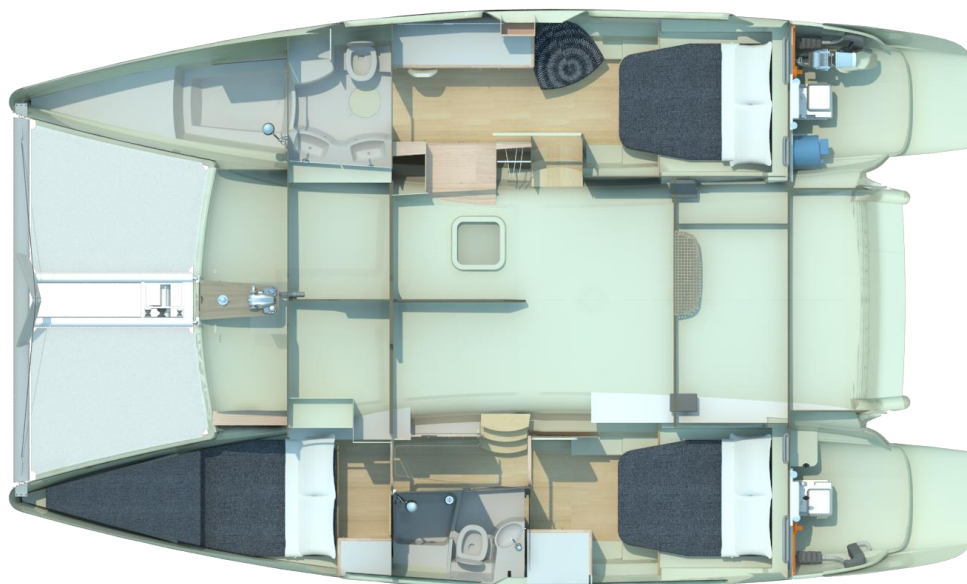
Chart Table

36. Keyboard & mouse tray
37. Flat screen TV / monitor (opt)
38. Books
39. Air conditioner vent (opt)

Cockpit

40. Insulated ice-box (opt)
41. Helm seat
42. Seats with lockers
43. Table
44. Teak grating over drains

4. INTERIOR ARRANGEMENT – HULLS



General

1. Dresser unit
2. Drawers
3. Double berth
4. Shallow stowage under
5. Shelf
6. Padded headrest
7. Hanging cupboard
8. Wardrobe shelves
9. Window with ports and curtains

Master Cabin

10. Seat with stowage
11. Digital safe
12. Hi fi / TV
13. Drawer unit (narrow)
14. Drawer unit (wide)

En-suite heads

15. Tecma electric WC
16. Basin with stowage under
17. Vanity unit with lights
18. Bath / shower
19. Upholstered head-rest
20. Teak seat
21. Glass panel

Work room

22. Bench
23. Vice
24. Drawers
25. Parts storage system
26. Occasional berth

Guest cabins

27. Full-length mirror
28. Cave lockers

Shared heads / passageway

29. Shower with glass door
30. GRP seat
31. Sliding door
32. Chart stowage / pin-board
33. Games locker
34. Linen locker

MAVERICK YACHTS

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ECOLOGICAL/OPERATIONAL ASPECTS

AS OUR ENVIRONMENT IS VERY FRAGILE, WE MUST PLEDGE OURSELVES IN WHATEVER WE DO, TO PROTECT IT FOR THE FUTURE

1. ENVIRONMENTAL PROTECTION

The following are some general points:-

- Do not use excessive speed when under power and minimise noise and exhaust pollution
- Prevent all spillage of oil or fuel into the sea. Always check the bilge water prior to pumping it overboard.
- Toilets must not be pumped out into the sea within 12 nautical miles of the shore.
- Always use ecologically sensitive consumables and cleaning materials.
- Never throw any waste products into the sea.

Use ecologically sensitive paints and dispose of excess and waste in accordance with local and internal regulations.

DISCHARGE OF OIL PROHIBITED			
THE FEDERAL WATER POLLUTION CONTROL ACT PROHIBITS THE DISCHARGE OF OIL OR OILY WATER INTO OR UPON THE NAVIGABLE WATERS OF THE UNITED STATES, OR THE WATERS OF THE CONTIGUOUS ZONE, OR WHICH MAY AFFECT NATURAL RESOURCES BELONGING TO, APPERTAINING TO, OR UNDER THE EXCLUSIVE MANAGEMENT AUTHORITY OF THE UNITED STATES, IF SUCH DISCHARGE CAUSES A FILM OR DISCOLORATION OF THE SURFACE OF THE WATER. VIOLATORS ARE SUBJECT TO SUBSTANTIAL CIVIL AND/OR CRIMINAL SANCTIONS INCLUDING FINES AND IMPRISONMENT.			
TRASH OVERBOARD LIMITATIONS			
It is illegal for any vessel to dump plastic trash anywhere in the ocean or navigable waters of the United States. Annex V of the MARPOL TREATY is an international Law for a cleaner, safer marine environment. Violation of these requirements may result in civil penalty up to \$25,000. fine and imprisonment.			
U.S. Lakes, Rivers, Bays, Sounds and 3 miles from shore	3 to 12 miles	12 to 25 miles	Outside 25 miles
ILLEGAL TO DUMP	ILLEGAL TO DUMP	ILLEGAL TO DUMP	ILLEGAL TO DUMP
Plastic & Garbage, Paper, Metal, Rags, Crockery, Glass, Dunnage, Food.	Plastic, Dunnage, lining & packaging materials that float, also if not ground to less than one inch. Paper, Metal, Rags, Crockery, Glass, Food.	Plastic, Dunnage, lining & packaging materials that float,	Plastic
State and local regulations may further restrict the disposal of garbage.			

2. MAINTENANCE

CAUTION

- You should ensure that your yacht is maintained to a high standard for your safety and for protection of the environment.
- Carry out the recommended maintenance tasks in the equipment manufacturers' handbooks included in this Owner's Manual.
- Always use the manufacturers' recommended consumables (oils, etc) and spares supplied by the manufacturer.
- When equipment is not in use, protect it from deterioration

MAVERICK YACHTS

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FIRE PROTECTION AND ESCAPE ROUTES

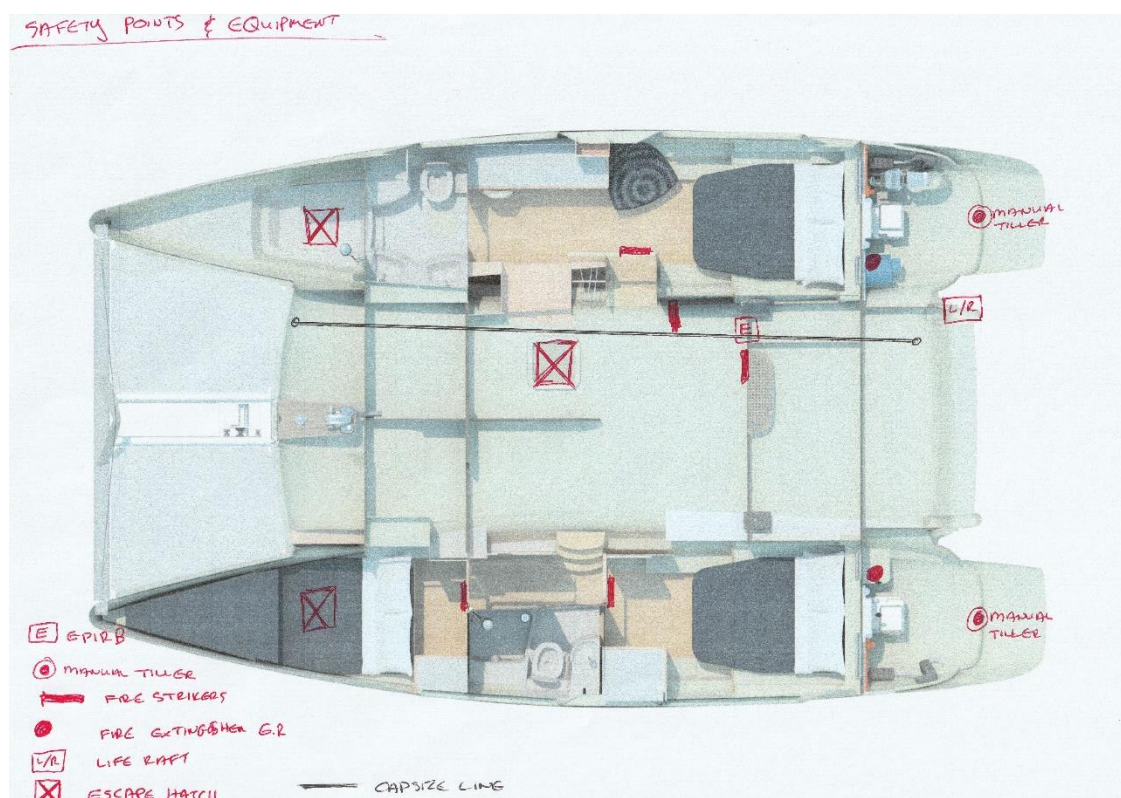
Always be aware of the danger of fire and be prepared to take the necessary action. The following points will help reduce the risk of fire or damage, or loss of life or injury in the event of fire:

- The skipper should ensure that crew and passengers know the location of the fire fighting equipment and that the escape routes are accessible. This is best done in the form of a “Passenger Briefing” at the time of departure
- Ensure that the fire fighting equipment is regularly maintained and operational at all times.
- Keep bilges clean and check both gas and fuel systems for leaks every week.
- Replace fire fighting equipment components with original parts only at intervals specified by the equipment manufacturer.
- Replace portable fire extinguishers, if expired or discharged, by devices of identical fire fighting capacity (minimum 5A34B rating).
- Do not store combustible material in the engine compartments.
- Ensure escape routes and hatches are kept clear and identified by an escape route symbol.
- Shut-off valves and switches for fuel and gas systems and electrical power must remain easily accessible.
- Fire extinguishers stores in lockers must remain visible and accessible.
- Do not leave craft unattended with cooking or heating appliances in operation.
- Do not smoke while refuelling or handling fuel.
- Do not fill any fuel tank or replace gas bottles when machinery is running, or when cooking or heating appliances are in use.
- DECK WASH can be used as an additional fire control method.



WARNING

- Never have uncontrolled flammable products on board.
- Always have fire extinguishers services and available.
- Ensure that all escape routes are accessible.



WARNING

- The owner/operator is responsible for providing/maintaining all fire extinguishers. They must comply with ISO-9094-1 specifications.
- These extinguishers must be located in the lockers indicated (including one portable fire extinguisher to be located within 2 metres of the helm. The locker door has a label attached indicating a Fire Extinguisher.
- The owner/operator is responsible for providing a Fire Blanket complying with national standards and this should be easily accessible within the Galley area.

Two types of fire extinguishers will be found on-board:

FIXED FIRE EXTINGUISHERS FOR ENGINE ROOM

Each engine compartment is protected by a FM200 automatically discharged fire extinguisher. It is the skipper's responsibility to determine if there is a fire in the engine room and to deal with the emergency appropriately.

- Replace fire fighting equipment components with original parts only at intervals specified by the equipment manufacturer.
- Have fixed systems refilled or replaced when expired or discharged.



WARNING

- In case of fire in the engine rooms, shut down engine and blowers.
- Engine compartment has a fixed extinguishing system. To avoid asphyxiation do not enter the area immediately after discharge and ventilate before entering.

FFE operation is as follows:-

- The heat build-up will trigger the extinguisher automatically.
- Should the Fire extinguisher fail to trigger automatically:
 - DO NOT open the engine lid
 - Shut down the engine and blowers
 - Manually trigger the extinguishers by pulling the handles in the cockpit lockers

FIRE STRYKERS

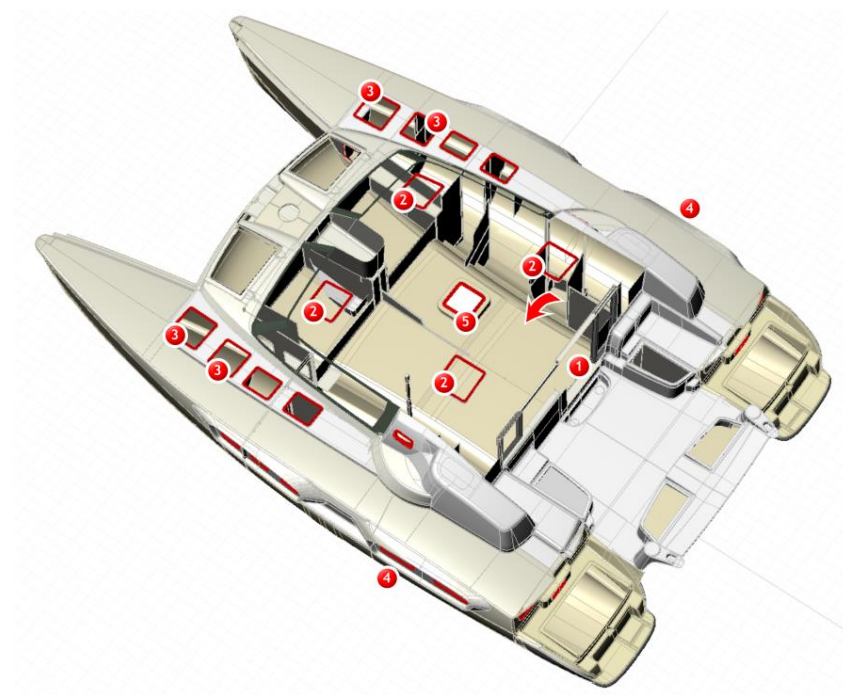
Fire Stryker operation is as follows:-

- Remove from storage housing.
- Simply hold the handle of Fire Stryker and remove the black lid at top.
- Take the scratch cap at the bottom of the unit and strike it against the top of the unit to activate Fire Stryker
- Spray the aerosol jet emitted by Fire Stryker at the base of the flames, until the fire is extinguished.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures for these fire extinguishers.

ESCAPE ROUTES

The Maverick 440 fire extinguisher positions and escape routes are clearly shown on the following drawing.



A - Via Saloon

1. Main sliding door and window into cockpit
2. Coach roof hatches (4)

B - Directly from hulls

3. Via deck hatches (4)
4. Knock-out windows

C - Inverted vessel

5. Emergency escape hatch in saloon floor

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HANDLING CHARACTERISTICS OF THE BOAT

1. PREVENTION OF CAPSIZE



WARNING: Sailing multi-hulls may be capsized if incorrectly handled. The following precautions apply:

- The helmsman must at all times be aware that the yacht could be vulnerable to capsize in roll or pitch and operate the yacht accordingly.
- Even in calm waters, sail should be reduced above 20 knots of wind allowing for gusts.
- Appropriate sails should be chosen to suit the prevailing wind and sea conditions.
- Exercise care when altering course from a following to a beam wind and in breaking seas.
- For the safety of the vessel and passengers the rig is assumed to be sacrificial in case of over load.

Catamarans are the most stable of all sailing vessels. Wind and wave conditions that could cause the vessel to capsize can be predicted to a reasonable degree of accuracy. The pilot books, sailing directions and charts indicate wind and current averages, hurricane seasons, trade winds and areas of violent over falls due to sub-oceanic terrain. Treacherous gusts occur in coastal regions downwind from mountain ranges or sheer cliffs. In your own area of sailing there is a wealth of local knowledge available.

Be careful during the following conditions:-

(Extracts from Gavin LeSueur's 'Multihull Seamanship' have been used in the following section. It is advisable to read the book in its entirety).

Wave induced capsize

There are two aspects to wave induced capsize. These are sideways capsize due to the wave alone and tripping end-over-end (also known as pitch poling). In many instances capsize will be a combination of the two.

Beam on wave only capsize

A breaking wave may cause a yacht to capsize by rolling it around the central axis of the vessel. Try not to get beam on to breaking waves. To reduce the risk of capsize; distribute the weight evenly away from the central axis, not into the bow or stern but out towards the sides. Other factors in beam on wave capsize include tripping effect of keels and boards.

End on wave capsize

Multi-hulls with fine bows have reduced stability in steep waves due to lack of buoyancy in the end. Buoyant bows and weight centralised over the length of the yacht reduces the pitching and thus reduces the risk of the bows being driven under the water and yacht tripping over a submerged hull. Pitch poling is dramatically affected by the height of the centre of effort of the sails. After surfing down a wave a multi-hull may slow in the trough or at the slope of the face of the wave ahead. The apparent wind increases as the vessel stalls. Overpowered and stalled there is no way to go but over.



WARNING

To prevent capsize from bad seamanship, remember the following:-

- Always carry a knife suitable for cutting sheets quickly.
- Never leave a rope in a self-tailing jammer.
- The loose end of loaded sheets should always run freely.
- If you think you need a reef then reef.
- Always reef to the gust wind speed.

2. Extreme Conditions

Storm sailing.

The speed of a multi-hull can be used to avoid weather patterns by either heading for port or sailing to the area where the least effect will be felt.

In the Southern hemisphere with your back to the wind, the safe quarter is on your left. Broad reaching in this direction will put you away from the lowest pressure area.

In the Northern hemisphere, with your back to the wind, the safe quarter is on your right. Broad reaching that direction will put you away from the lowest pressure area.

Storm Preparation:

- Double lash everything that has to remain on the deck, e.g. dinghy, sailboard, spare fuel tanks, etc.
- Remove all unnecessary lines. Stow them for easy and quick access below deck.
- Prepare the parachute sea anchor and the drogue lines in a neat pile if you have one.
- Have the helm area protected and give the helmsman access to essential equipment. A white signalling flare should be available when ships approach too close.
- Ensure access to binoculars and a torch.

Windward storm sailing

As a survival tactic, sailing to windward on a multi-hull has some advantages. You remain in control. The bows have momentum to punch through waves. The worst breakers can be avoided or approached at the optimum angle. To point effectively in high wind conditions, your well-reefed sails should have narrow sheeting angles and some shape. Motor sailing with diesel engines and a storm jib is a very effective way of clawing to the windward in storm conditions. Sailing to windward into big step waves required careful helm work. You need to bear away sharply at the top of these waves to prevent failing of the peaks. Sailing to windward is wetter and windier than any other direction.

Tacking and stalling

Tacking and stalling in rough sea with minimal sail tacking can be difficult and dangerous. The danger is stalling part way through the tack and failing backwards on a wave. If the rudders are not held firmly they can spin sideways and potentially break.

Having to back the jib and reverse around is dangerous. If in doubt, run with the sea and gibe to get onto the new tack.

The storm sail

The windward performance is dependent on a balanced rig. You will need that to crawl off a lee shore in a gale. Roller furler or storm sails are used to balance the rig. Unfurl just enough sail to create enough drive without also increasing drag.

The storm mainsail

A storm trysail is rarely seen on multi-hulls. The more practical alternative is to have a strong third storm reef section in the mainsail. This section of the sail needs to be heavily reinforced at both the tack, clew and along the reefed foot.

Downwind storm sailing

Most cruising multi-hulls are at a risk of broaching or losing rudder control at speeds of over 20 knots. Wave fronts travel at varying speeds. A 3m wave may travel at 20 knots. Large storm waves may travel at up to 40 knots. Try not to sail directly down waves or at right angles to their direction. It is best to sail down the face at a slight angle with control.

Remember the following:

- Know your position relative to the storm centre before deciding course changes.
- When sailing downwind, note the true wind speed every few minutes.
- Carry the amount of sail for the true wind, not apparent.
- Reef to the gusts.
- When trailing warps or drogues, bridle them for directional stability.

Drogues: A drogue is a friction device towed behind a multi-hull sailing downwind. They can be used to reduce overall speed, stop or slow surfing down waves, reduce broaching tendencies by stabilising direction and ease loads on rudders and helm. Sailing downwind under storm sails is not enough to stop pitch-poling or broaching. This is especially true in gusty conditions with steep seas.

Altering course from a following to a beam wind, remember the following:-

- Watch where the swell is coming from – you will more than likely be taking the waves at more of an angle when moving onto a closer degree of sailing.
- The boat will have more pitch movement, so be careful that everything is stowed well inside and on deck.
- The apparent wind increases as you move from a run to a reach, so always reef if you need to before going onto a closer angle.
- Be wary that you will be going faster when you go onto a closer angle of sailing. When moving from a run to a reach the rudders and the rig load up, be wary that it will be slightly stiffer to steer and be very careful of the load you are placing on the rig.

RECOMMENDED SAILING CONDITIONS

Sail Configuration

Main & Genoa	with apparent wind up to 16 knots
1 reef main & Genoa	with apparent wind up to 20 knots
1 reef main & 1 reef Genoa	with apparent wind up to 24 knots
2 reef main & 1 reef Genoa	with apparent wind up to 28 knots
2 reef main & 2 reef Genoa	with apparent wind up to 32 knots

Handling under power

With an engine located in each hull, the catamaran manoeuvres well. A maximum speed of 9 knots can be achieved subject to sea conditions.



WARNING

The reefing schedule must be adhered to.

The bimini arch includes the main sheet fixture including two strong points on the arch and is designed to take a maximum load of 841kg.

By adhering to the designed rigging layout the load will not exceed the maximum load.

By adhering to the reefing schedule the load will not exceed the maximum load.

Should the load however be exceeded the safety measure is that the main sheet blocks mounted on the bimini arch will break. There are four other identical blocks on the boat that can be used to replace the damaged block. These blocks are normally used when using the spinnaker and screecher and are positioned on the bows and on the deck to port and starboard of the cockpit.



WARNING

For the safety of the vessel and passengers the rig is assumed to be sacrificial in case of over load.

Should the rig fail it should be cut away as soon as possible to eliminate the possibility of puncturing the hull structure. A cable cutter suitable to cut the cables or an alternative **MUST** be kept on board at all times. Note that the antennae are mounted on top of the mast and rigging and communications could therefore be hampered.

MAVERICK YACHTS

MAVERICK 440

SAFETY PRECAUTIONS ON BOARD

1. LIFE RAFT STOWAGE

Provision is made for storage of a life raft in the stbd aft area of the cockpit. Life rafts should be attached to the boat before being deployed.



WARNING

It is the owner's responsibility to ensure that an accredited agent of the life raft manufacturer services any life raft within the time limit allowed by the manufacturer or the national authority.

It is the responsibility of the boat owner/operator:

- to ensure that fire-fighting equipment and safety gear are readily accessible when the boat is occupied, and
- to inform members of the crew about:
 - o the location and operation of fire-fighting equipment,
 - o the location of escape routes and exits,
 - o the location and safe practice of all safety equipment including first aid kit, life jackets, life raft and flares,
 - o what to do in case of an emergency.

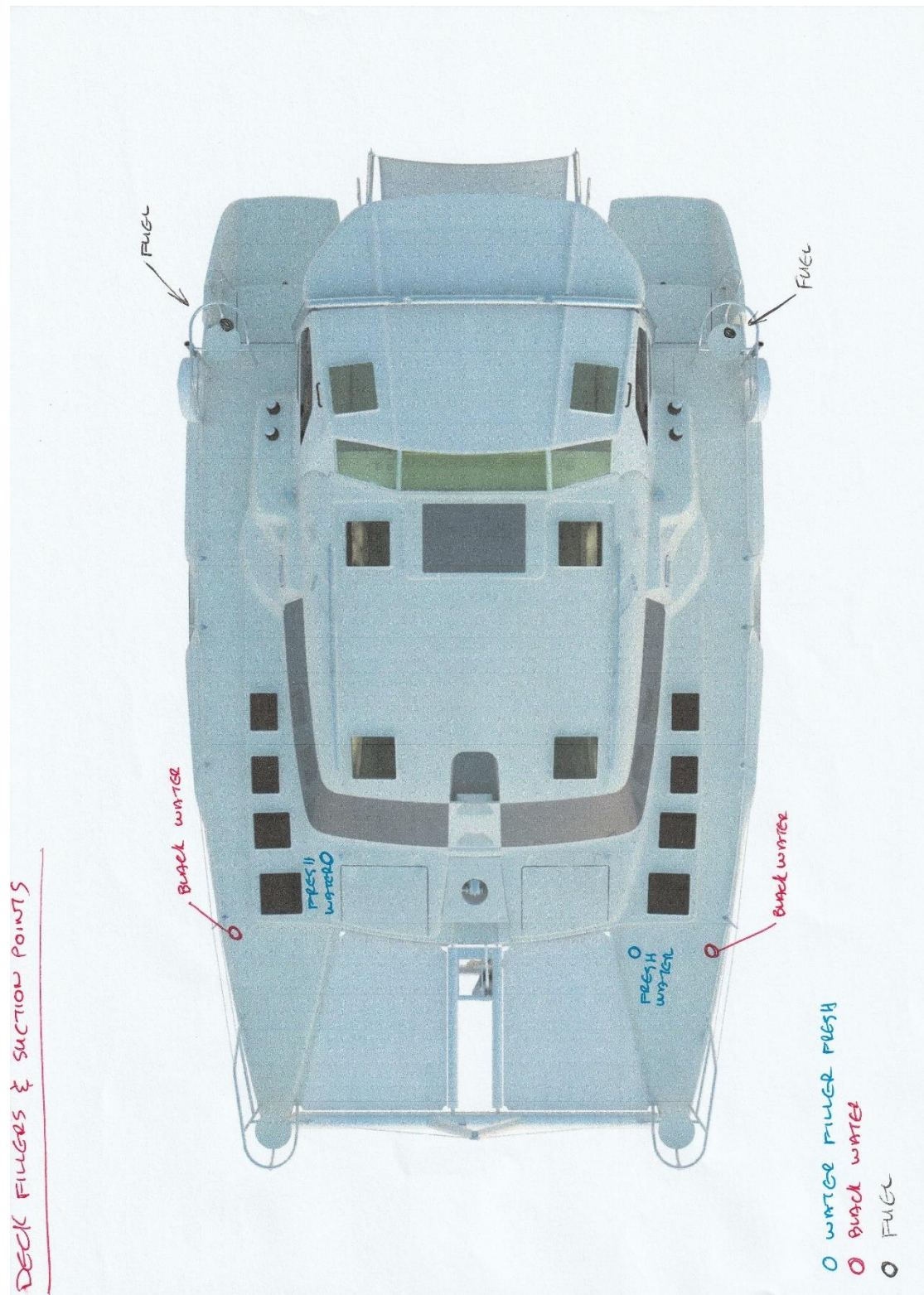
2. FLOODING

CAUTION

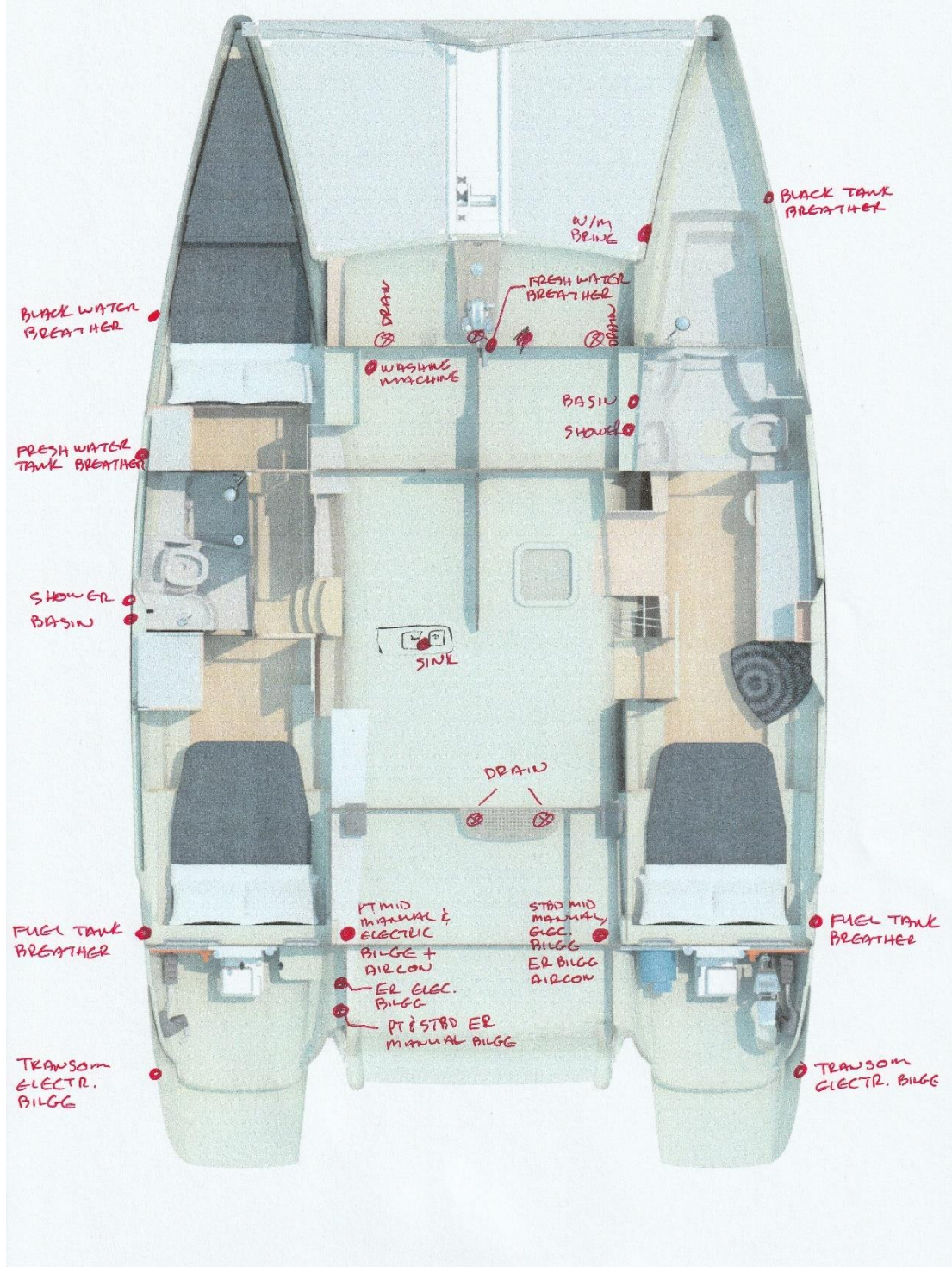
- Keep hatches and port lights closed at sea.
- Keep the bilges dry and check them regularly for water and oil.
- Keep all bilge pumps and suction clean and serviceable.

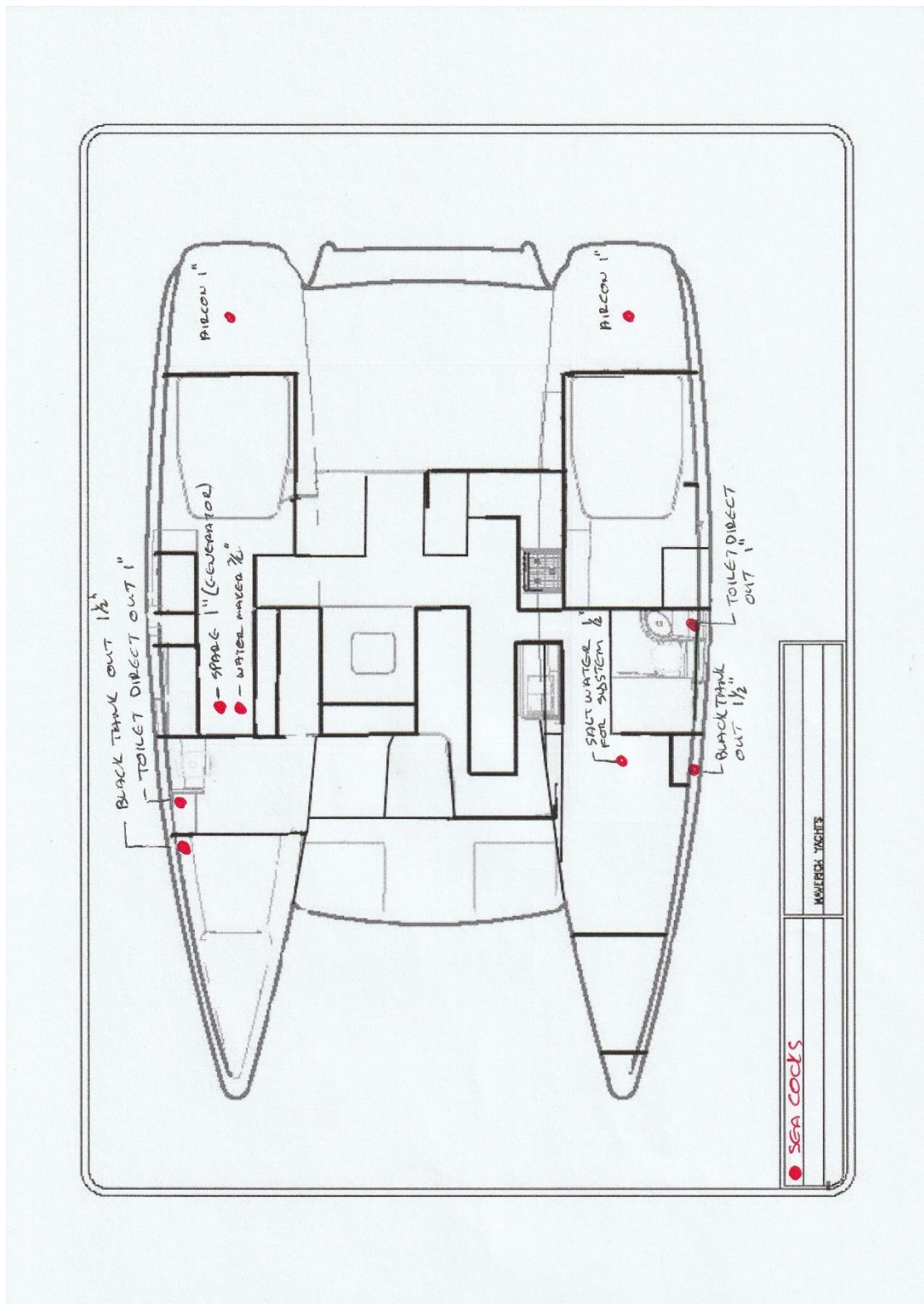
3. THROUGH HULL FITTINGS

The THROUGH HULL FITTINGS drawing shows all above and below waterline through hull fittings.



SKIN FITTINGS
ABOVE WATERLINE





CAUTION

- All other sea cocks should be in the OPEN position when the craft is in operation.
- When sea cocks are shut the associated equipment must be shut down to prevent damage to the equipment.

NOTE

- Below waterline fittings are fitted with integral sea cocks in case of equipment failure. These can be closed to prevent flooding.
- The BLACK WATER outlet seacock is to be kept closed within the “12 miles offshore no discharge limit” in compliance with national and international regulations.

MAVERICK YACHTS

MAVERICK 440

STORING, DOCKING, TRANSPORTING

1. LAY-UP AND WINTERISATION

In the event of the vessel being laid up for any length of time (+/-2 months or more), particularly in cold weather, the following must be carried out:

- Remove the batteries for controlled temperate storage.
- Ensure all the following water systems are drained:
- FRESH WATER
- GREY WATER
- BLACK WATER
- WATER MAKER
- Ensure water-maker is inhibited (pickled) for long-term storage as recommended by the equipment manufacturer. **Note:** See water-maker section in this manual.
- Open up bilge covers and floorboards for surveillance.
- Ensure anti-freeze is in the engine cooling systems.
- Check that all sea cocks are closed.
- Empty the fresh water tanks.
- Leave torches, fire extinguishers and pump handles position for easy access.
- Ensure that the vessel, and particularly the bilges, is checked regularly.

2. HULL TRANSPORT.

In the event of the hull being lifted, slings should be placed at the bulkheads and adjusted for length to ensure the vessel lifts horizontally. The yacht may be docked on its hull bottom but must be adequately supported over a wide area with soft compliant supports. The total weight of the yacht **MUST NOT** all be resting on the keels. The keels are sacrificial and not designed to take the entire load.



WARNING

Minimum strap width is 300 mm for each strap (total 2 lifting points).

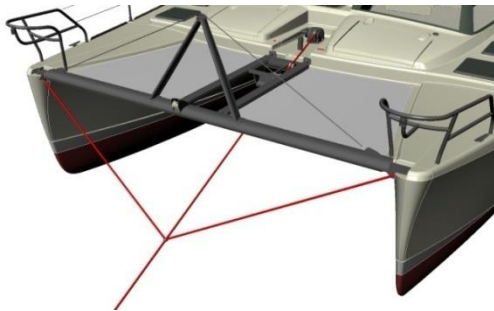
3. TOWING, MOORING AND ANCHORING

It is the owner's/operator's responsibility to ensure that mooring lines, towing lines, anchor chain(s), anchor lines and anchor(s) are adequate for the vessel's intended use, i.e. the lines or chains do not exceed 80% of the breaking strength of the respective strong point.

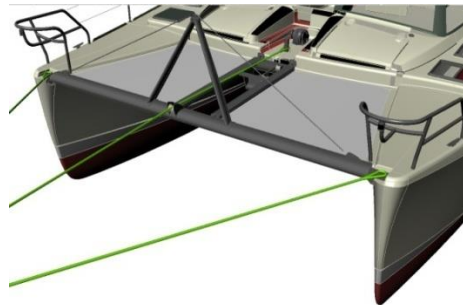
- Forward strongpoint for anchoring and being towed – maximum 57 kN
- Forward strongpoint for mooring – 46kN
- Aft strongpoint for mooring – 39kN

Owners should also consider what action is necessary when securing a tow-line on board. Where the purpose of a cleat is not self-evident, it is labelled with a warning sign. These cleats are not primary strong points and are not to be used for anchoring or towing.

Refer to drawing - ANCHORING



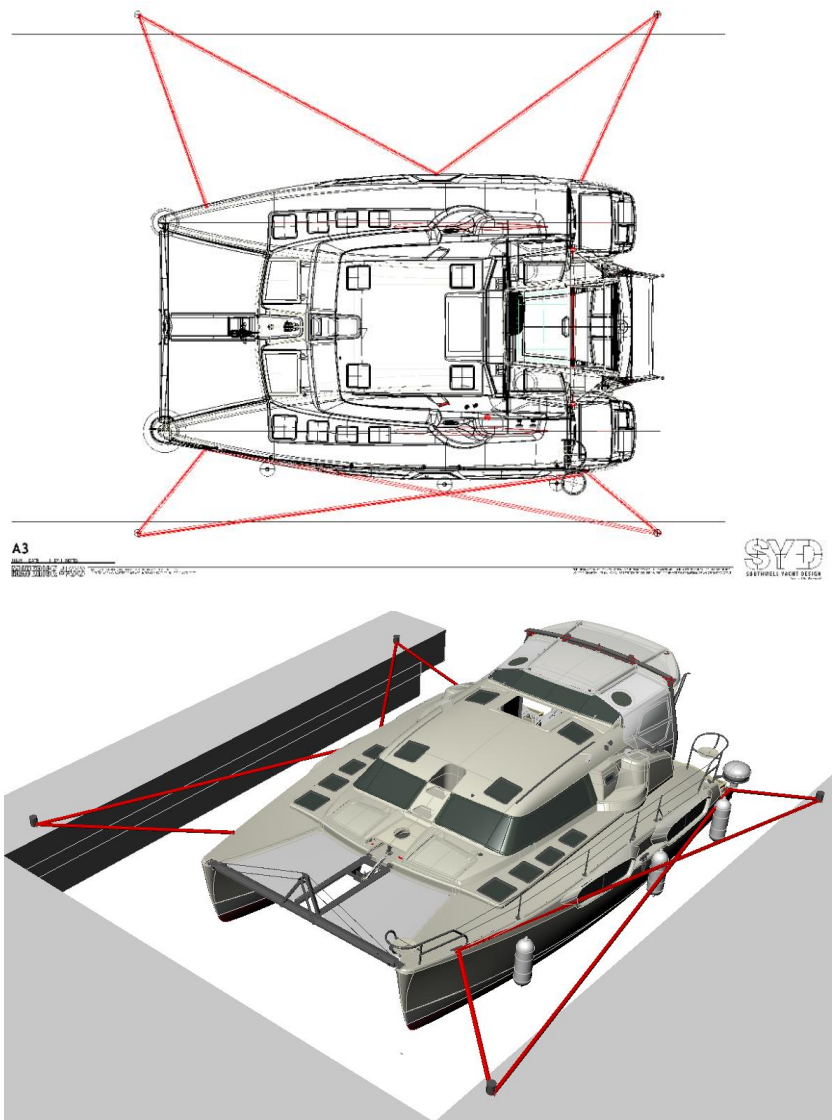
Refer to drawing - TOWING



CAUTION

- Always tow or be towed at a slow speed. Never exceed the hull speed of a displacement craft when being towed.
- A towline shall always be made fast in such a way that it can be released when under load.
- Owners should also consider what action is necessary when securing a towline on board.

Refer to drawings - MOORING



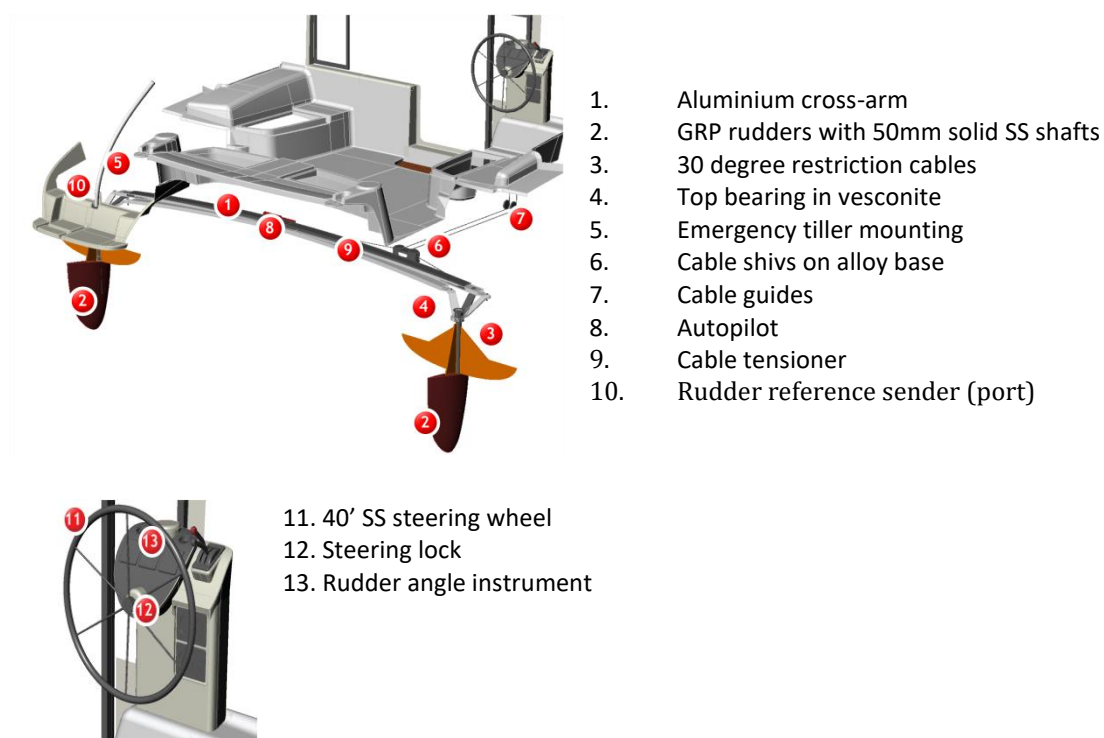
MAVERICK YACHTS

MAVERICK 440

STEERING

DESCRIPTION

The M440 wheel is located at the helm station and is mounted to a Lewmar steering box. The sprocket and chain connects to an 8mm 7x19 wire rope which is lead through a series of pulleys to the cockpit floor. Here the wire rope is made off to the Tiller Tie Beam and tensioned by means of bottle screws. Straps attached to the tie beam restrict helm range from approximately 30 degrees port to 30 degrees starboard. The steering system complies with ISO 8847. See drawing for clarity.



NOTE

HDPE bushes provide long life, low friction rudder stock bearings.

OPERATION

Lock-to-lock operation is achieved through 2 turns of the wheel.

A wheel mounted steering brake allows the helm to be locked.

MAINTENANCE

- Tension the 8mm 7 x 19 mm wire rope every 6 months, inspect for broken strands and signs of fatigue. Replace all wire rope at least every 10 years.
- Lubricate the steering system pulleys and bulkhead steering box at least once a year.
- The tie beam steering rose joints are sealed and require no maintenance, apart from inspection every six months. If any play is found the rose joint must be replaced. Consult the Equipment list for the correct model.
- The Rudder shaft bearings are HTPE and require no maintenance.

CAUTION – Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

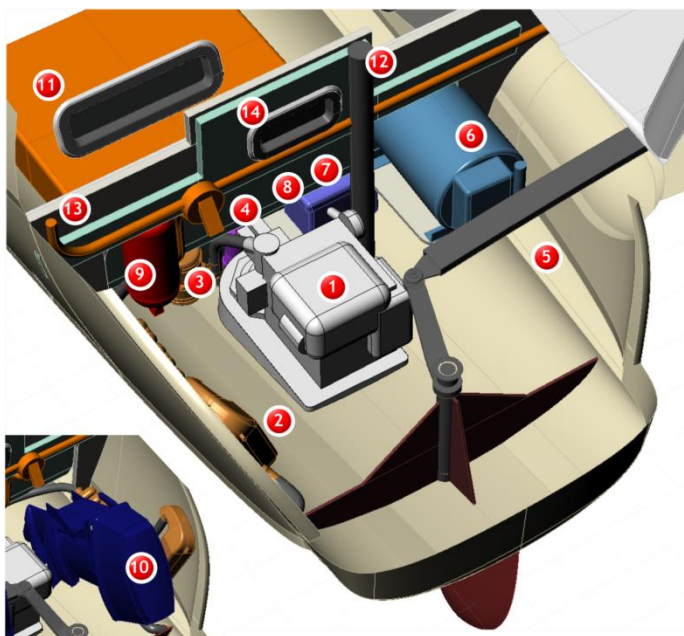
MAVERICK YACHTS

MAVERICK 440

ENGINE AND DRIVE SYSTEM, YANMAR

DESCRIPTION

The M440 is equipped with twin 45 hp freshwater cooled Yanmar Marine Diesel engines, Model 4JH45CR, with SD60 Sail drives fitted with 3-bladed folding props.



1. Yanmar or Volvo 30/40/45 HP diesel
2. Anti-siphon gooseneck & muffler
3. Water trap
4. Automatic bilge-pump
5. Manual bilge-pump
6. 40l Calorifier / water heater
7. Fuel filter
8. Starter battery
9. Fire extinguisher
10. Outboard stowage (Stbd)
11. Engine room vent

CAUTION – when under sail

If the boat has a fixed propeller, the control lever must in the astern position.

If the boat has a folding propeller, the control lever must be in the astern position.

CAUTION – Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

CAUTION – Do not stow combustible material in the engine space. If non-combustible materials are stowed in the engine space, they shall be secured against falling into machinery and shall cause no obstruction to access into or from the space.

Engine Starting

2 x 100 A/hr Wet cell batteries provide 12V for starting the main engines.

Switch the starter battery circuit to the ON position before starting the engines. It is located inside the port and starboard lockers in the cockpit.

Engine Controls

Morse MT-3 (by Teleflex) Engine Controls and control cables provide engine throttle and gear shift control. The engine controls are mounted at the helm position. Below the two controls are engine panels with the rev counter, hour meter, overheating buzzer, engine stop buzzer, etc.

Cooling

The engines are fresh water cooled through a saltwater heat exchanger.

Raw seawater enters the cooling system via a seacock on the sail drive leg and passes through a seawater filter before entering the engine.

Exhaust

The exhaust passes through a muffler and exits the hull through the outer hull side.

Instrumentation

The port and starboard engine instrument panels are mounted at the helm station.

OPERATION

- Refer to OEM Instruction Manuals for detailed description and operation.
- **Before starting the engines, the following needs to be ensured:-**
 - The engine Raw Water (seawater) sea cocks are in the open position,
 - There is adequate fuel in the tanks (refer to diesel supply below for correct operation of the fuel system),
 - There is enough engine oil in each engine as measured according to the engine Owner's Manual.

- During initial engine operation, ensure that raw water coolant is correctly expelled through the appropriate skin fitting (see diagram) and that engine temperature is correctly maintained by observing the engine control panel from time to time during engine operation.

OPERATOR MAINTENANCE

CAUTION – Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

CAUTION

- The propellers should be checked regularly. The anodes should be checked at least every month to ensure that they are firmly secured. During this check, the propeller retaining nuts should be tightened. Anodes must be replaced if excessively corroded. Failure to do this will result in the propellers and shaft corroding.
- Attention should be paid to the exhaust with regard to the condition and the load on the engine. Black smoke indicated an overload.

MAVERICK YACHTS

MAVERICK 440

DIESEL FUEL SYSTEM

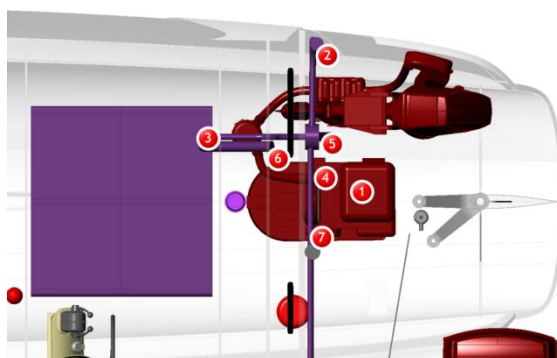
DESCRIPTION

The M 440 fuel system complies with ISO 10088 standards. The tanks are made of Aluminium to ISO 10088 standards and are pressure tested to 30 kPa.

Two aluminium fuel tanks of 400 litres each are situated below the aft cabin bunks.

Fuel shut-off valves are situated above the fuel tanks.

Each tank is fitted with a breather hose and skin fitting aft either side of the transoms.



1. Engine
2. Fuel filler cap
3. 400l fuel tank
4. Fuel transfer pump
5. Fuel filler valve (fills one or both tanks)
6. Fuel return from engine

OPERATION

1. Filling fuel tanks

- Each fuel tank is to be filled separately through two skin fittings marked “DIESEL” situated on the transoms.
- Use clean uncontaminated diesel fuel complying with standards listed in the Volvo and Yanmar engine operator’s manual.
- Make sure the engines are switched off.
- Unscrew the filler cap.
- Fill slowly with diesel until full.
- Replace filler screw cap.

2. Preparation for motoring.

- Ensure that the supply and return valves are open.

3. Shut down.

- When leaving the boat unattended all fuel system valves should be closed.

OPERATOR MAINTENANCE

- Draw test samples from each tank to test for contamination after refuelling and weekly during normal operation. The valve must be opened and the host plug removed before drawing fuel.

GAUGES

The fuel gauge display is situated at the navigation station. The port gauge display represents the port side fuel tank and the starboard gauge display is the starboard fuel tank.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

CAUTION:

- Inspect the fuel filter/separators for contaminated fuel.
- Contaminated fuel (water and dirt) should be drained and replaced.
- Use a biocide to keep fuel system free from bacteria.
- Water contaminated fuel, apart from combustion problems, causes rusting and permanent malfunction of engine and injector components. Dirt contamination can cause excessive engine and injector wear. Bacteria can cause fuel blockages.
- Do not use ammonia-based detergents on brass fuel system components as the ammonia attacks brass and creates microscopic cracks leading to catastrophic component failure and the risk of fire.
- Wintering – Keep fuel tanks full to prevent condensation.

MAVERICK YACHTS

MAVERICK 440

AC ELECTRICAL SYSTEM 110V

DANGER

The AC electrical system represents a potential hazard and the following precautions must be applied:-

1. The AC system is 110V.
2. Never work on the electrical system unless power is switched off. Remember this is a two-wire system and that full isolation is necessary.
3. The vessel is fitted with an inverter/battery charger. AC power might still be present with all other supply lines isolated. **Switching off the house battery switch does not isolate the DC supply to these units!**
4. Only a qualified marine electrician should maintain the electrical installation.
5. Shut off the AC power before leaving the yacht.
6. Do not modify the craft's electrical systems or relevant drawings. Installation, alterations and maintenance should be performed by a competent Marine Electrical Technician.
7. Connect metallic housings or enclosures of installed electrical appliances to the protective conductor system in the vessel (green or green with a yellow stripe conductor).
8. Use double insulated or grounded (earthed) electrical appliances.
9. If the reverse polarity indicator is activated, do not use the electrical system. Correct the polarity fault before activating the electrical system on the craft.

DESCRIPTION

The Alternating Current (AC) electrical system on the boat is a 110V, single frequency (60 Hz) system. High power equipment (air conditioner and washer/dryer) on the boat utilises the 110V system, while all the other AC equipment uses the 24V system. Electric power is sourced from one of two points – the shore power supply or automatic inverter/battery chargers. Switching between inverter/battery charger and shore power is automatic and controlled by the inverter/battery charger if switched on.

OPERATION

The operation of all principal components is controlled from the main electrical switch panel. AC electrical switching is on the lower side of this panel. Refer to Electrical Drawings for schematic layouts.

CAUTION:

Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures for the inverter/battery chargers before proceeding to use the AC electrical system.

1. Inverter/battery chargers:

- Ensure all AC breakers, including the shore supply selector breakers, as switched off.
- Use the remote inverter/battery charger switches to activate these units. Power output from these units is 110V and is supplied via the AC switch panel. The units can be used individually or simultaneously.
- Shore power can be switched on when an inverter/battery charger is also switched on – in this instance the units change function from an inverter to battery charger instantly and automatically. The same applies in reverse, if shore or genset power is interrupted or switched off.

CAUTION:

- Power demand can easily exceed available supply from the inverter/battery chargers. Electrical equipment generating heat (dishwasher, toaster, electrical kettle, hair dryer, etc) uses considerable amounts of power – it will probably be necessary to limit their use while the inverter/battery charger is operating. Alternatively, connect to an alternate power supply.
- The use of the inverter/battery charger is limited by the house battery capacity. If used for extended period at high loads, the house batteries will be run flat. Protection circuits built into these units will protect them, but will lead the vessel with a flat house battery bank!

NB: Check the voltage supply on shore as being 110V.

2. Shore power:

- This vessel has a facility for 110V SHORE POWER. All the AC systems are 110V on board.
- Separate shore power plugs are supplied for the 110V.
- The shore power plug is situated next to the starboard transom step.
- To connect the vessel to shore power, simply plug the fitting connection from the shore to the fitting next to the starboard transom step.
- Isolate shore power at the shore end before connecting and disconnecting the power.



WARNING

- Do not allow the shore-power cable end to hang in the water. An electrical field can be created which can cause injury or death to nearby swimmers.
- **To minimize shock and fire hazards:**
- Turn off craft's shore-power connection switch before connecting or disconnecting shore-power cable.
- Connect shore-power cable to craft's inlet before connecting to shore-power source.
- Disconnect shore-power cable at shore-power source first.
- Close shore-power inlet cover tightly.
- Do not alter shore-power cable connectors – use only compatible connectors.
- Ensure the shore-power cable end fittings are not wet when connecting to the vessel or shore station. Death, injury or damage could occur!

3. Genset: (If Installed)

- Physically check the Genset as recommended in the Owner's Manual (OEM) before starting and make sure cooling water inlet valve is open.
- Ensure the Genset Transfer Breaker is switched off before starting the Genset.
- Start the Genset. If cold, allow it to warm up for two minutes before switching on the Genset Transfer Breaker.

- Switch on AC equipment breakers as required.

CAUTION: refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

MAVERICK YACHTS

MAVERICK 440

24V DC ELECTRICAL SYSTEM

DESCRIPTION

Battery Bank: There are two battery bank systems.

Refer to Electrical drawings for schematic layouts.

HOUSE BATTERIES:

- These consist of 5 x 200 Amp/H Lithium-Ion batteries housed under the mast base, which supply power to all electronic instruments, light circuits, fridge and freezer, bilge pumps, etc.
- The house batteries are maintenance-free provided they are used and charged correctly. The circuit breaker, when in the OFF position, will isolate all systems except the automatic electric bilge pumps and the engine starter batteries. Switch to the OFF position when leaving the boat.
- The house battery circuit breaker is situated directly below the main switch board to the right of the nav station.

STARTER BATTERIES

- There is one starter battery for each engine. These batteries are 100 Amp/H units situated in the port and starboard cockpit lockers.
- The starter batteries have their own isolator switch situated in the port and starboard cockpit lockers. This switch must be in the ON position before starting the engines.
- The starter batteries are charged via a battery management system by the engine alternators and via a trickle charger from the house batteries.
- Power to the starter batteries can be received by switching the toggle at the helm station which connects the two engine batteries.

Charging:

Charging is done by

1. Shore power, or

2. The engine alternators / Balmar alternators via the battery management system while the engine is running, or
 3. via the solar panels or,
 4. running the generator (if installed)
- These 24V charging sources can be used independently or together. No manual control of charging is possible – each unit automatically regulates it's self.

MAIN SWITCHBOARD

The main electronic switchboard is located to starboard of the nav station. All instruments and equipment are routed through this board.

VICTRON

The VICTRON is an integrated battery monitor and inverter/charger control. It displays the critical information necessary for 24V DC System battery management and allows precise control of charger features.

OPERATION

CAUTION

Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures for all the electrical equipment before proceeding to use the DC electrical system.

GENERAL USAGE

1. Ensure all breakers on all DC panels are switched off.
2. If the vessel has been in long-term storage or had recently undertaken a rough passage, physically check all batteries – check battery fixing and strapping, general status and that terminals are free of corrosion.
3. Switch on all battery switches.
4. Switch on all circuit breakers as required.



WARNING

All battery switches and major breakers must be switched on when the vessel is in operation. Failure to do so could result in failure of operation of critical navigation or safety equipment aboard the vessel.

NOTE

Refer to the following electrical diagrams for position and wiring detail for all the electrical equipment. Although not necessary for routine operation, an understanding of the system layout will greatly assist with fault finding and emergency procedures.

On leaving the vessel unattended, switch off all electrical equipment, switch off all breakers and switch off all battery switches. Power supply to the electrical bilge pumps is supplied independently from all these circuits and will remain operable in this condition.

DANGER

NEVER WORK ON ANY ELECTRICAL ITEM WHEN IT IS IN USE, OR POWER TO IT IS SWITCHED ON.

NO ELECTRICAL ITEM OR CABLE SHOULD BE MODIFIED UNLESS BY A QUALIFIED MARINE ELECTRICIAN.

NEVER CHANGE THE CAPACITY OF A FUSE OR BREAKER.

NEVER INSTAL NEW EQUIPMENT WHICH HAS A GREATER POWER RATING THAN THAT OF ITS PREDECESSOR.

MAVERICK YACHTS

MAVERICK 440

NAVIGATIONAL INSTRUMENTS

DESCRIPTION

SWITCHBOARD

All instruments have main power switches on the main board. It is important to ensure that the instrument itself is turned off before switching it off at the main board.

MAGNETIC COMPASS

The magnetic compass is mounted at the helm. A small green interior light illuminates it at night. This compass displays the yacht's heading relative to magnetic north. It operates independently of all other instruments and is a good reference point when setting up or checking other navigation equipment.

CAUTION

Refer to OEM Instruction Manuals for detailed description, operation and maintenance.

AUTO PILOT

The Auto Pilot is mounted at the helm. This is the main control of the autopilot for the yacht. Information is gathered from the EV1 compass (mounted under the helm seat); wind and yacht speed, wind and yacht heading and GPS position data. All this information enables the autopilot to control the yacht's heading on a desired course. This linear motor and arm is attached to the starboard rudderstock. The yacht may be steered by either magnetic bearing, apparent wind bearing or to a waypoint as defined by the GPS OR chart Plotter.

CAUTION

Refer to OEM Instruction Manuals for detailed description, operation and maintenance

WIND INDICATOR

The Wind Indicator (i70) is mounted at the helm. This instrument displays the speed and angle of wind either true or apparent to the speed of the yacht. The information is derived from the masthead transducer and from the speed fed from the Tri-data panel. The information supplied is used for manual and auto pilot sailing.

CAUTION

Refer to OEM Instruction Manuals for detailed description, operation and maintenance.

TRIDATA AND REPEATER

The Tri-data and repeater (i70) is mounted at the helm and provide comprehensive speed, depth, sea temperature and timing information. The transducer mounted in the hull in the starboard cabin provide the information required.

CAUTION

Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

VHF

The VHF radio is mounted at the navigation station.

As an option a Command Mic is mounted at the helm station.

A radio operator's licence is required to operate the radio.

CAUTION

Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

CHARTPLOTTER / RADAR

The Chart plotter / Radar Navigational display unit is mounted at the helm. The unit uses the GPS satellite differential system to provide greater positional accuracy as a navigational aid. The GPS should always only be used as an aid to navigation and should never replace common sense and navigational judgement. Always maintain a permanent watch so you can respond to situations as they develop.

CAUTION

Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

NAVIGATIONAL LIGHTS.

The yacht comes equipped with standard ocean-going navigation lights. These are controlled and illuminated by relevant LED on the main switchboard. The following lights are available:-

1. Deck floodlight – main spotlight on the mast used when deck work is being carried out at night.
2. Anchor light – all round white masthead light used when at anchor.
3. Steaming lights – one green (starboard) light, one red (port) bow light and one white aft light used when under motor at night.
4. Sailing lights – tri-colours (red/green/white) masthead used when sailing at night.

OPERATION

- Operate as per owner's manual supplied.

CAUTION

Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

MAVERICK YACHTS

MAVERICK 440

WATER SUPPLY

DESCRIPTION

There are two fresh water tanks onboard with a total capacity of 1000 litres. One 500L tank is situated under the Port forward cabin bunk top and one 500L tank located on the opposite side in the saloon under the day bed. The tanks are independent and must be filled through the filler caps situated on the fore ward deck. The tank selector valve is situated in the systems cabinet in the port passage.

The system operates:

- Faucets in galley, heads and shower on the port transom
- Fresh water is heated by the calorifier via the port engine manifolds, or AC shore power.

OPERATION

Using Water:

- Turn on the “Fresh Water Pump” breaker at the DC switch panel. The water pressure pump will start running until the system is primed.
- Open a faucet. Any air trapped in the water lines will vent first, then a steady flow of water will be evident.

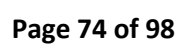
NOTE: Should the pump continue running the system could have lost prime. The following are possible causes and remedies:-

- The tanks have run dry – fill tanks.
- A leak has developed in the system – pipes should be inspected for breach.
- A faucet could be open.
- An appliance – i.e. washing machine or water maker is drawing off at high levels.

- 2x Jabsco 31750 series sensor maximum VSD with a pumps capacity of 14 litres per minute is installed. Should the pump fail or be in need of maintenance, ensure the source valves are shut off in order for the pump to be isolated and removed. The second pump can then be selected.

CAUTION:

Ensure the pump to be removed or serviced is switched off at the DC switch panel before disconnecting. Failure to do so could result in damage and/or injury.



MAVERICK YACHTS

MAVERICK 440

CALORIFIER (WATER HEATER)

DESCRIPTION

The **QUICK** water heater is situated behind the port engine. Fresh water is heated either by the engine manifold or can be heated via AC shore power or by generator. The Calorifier holds 40 litres of water.

Shore Power

- On AC panel switch on the water heater breaker.
- Ensure water pressure switch is on.
- Follow OEM instructions.

Engine heated

- Ensure water pressure switch is on.
- Ensure shut-off valve on salt water engine cooling line from engine to Calorifier is open to allow hot water circulation through Calorifier.
- Engine must be running in order to heat the water.
- Follow OEM instructions.

OPERATOR MAINTENANCE

Maintain this unit per OEM instructions, giving particular attention to winterisation, electric maintenance and controls to ensure good service.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

MAVERICK YACHTS

MAVERICK 440

GREY WATER SYSTEM AND DRAINS

DESCRIPTION

- A system for “grey” water has been installed for the discharge of bath / shower water. Typically an interior floor level will be lower than the surrounding ocean, thus not allowing free discharge as this would cause flooding by ocean water.

NOTE:

Shower drain breakers should always be in the ON position when this vessel is in service as it is important for the proper function thereof. Failure to do so could result in flooding and damage to your vessel.

OPERATION

- Switch on all shower drain breakers on AC panel when vessel is taken into service.
- The grey water system is operated by switching the pump on as required.

MAVERICK YACHTS

MAVERICK 440

BILGE PUMPS

DESCRIPTION

- Each hull has a bilge that extends from just aft of the bunk in the aft cabin to the fwd end of each hull. The bilges are accessed through hatches in the cabin floors. Any leaks in water or fuel pipes drain into the bilge. The bilge should be checked before every trip. Electric bilge pumps are installed just fwd of the bunks in the aft cabins.
- Each engine room has an electric bilge pump installed.
- Each extended transom has an electric bilge pump installed
- The electric bilge pumps, each with a capacity of 500 gallons per hour (31.5 litres per minute) are wired directly to the house batteries via float switches and will operate whenever there is fluid in the bilges. When operating, a warning light will come on at the helm's station.
- Manual bilge pumps are installed in each hull. Both pumps can be operated from the cockpit. A manual bilge pump at the aft cockpit seat can be changed with a "Y" valve to pump either to pump either engine room.

OPERATION

- Automatic/electric bilge pump system needs no operator injunction.
- Manual:

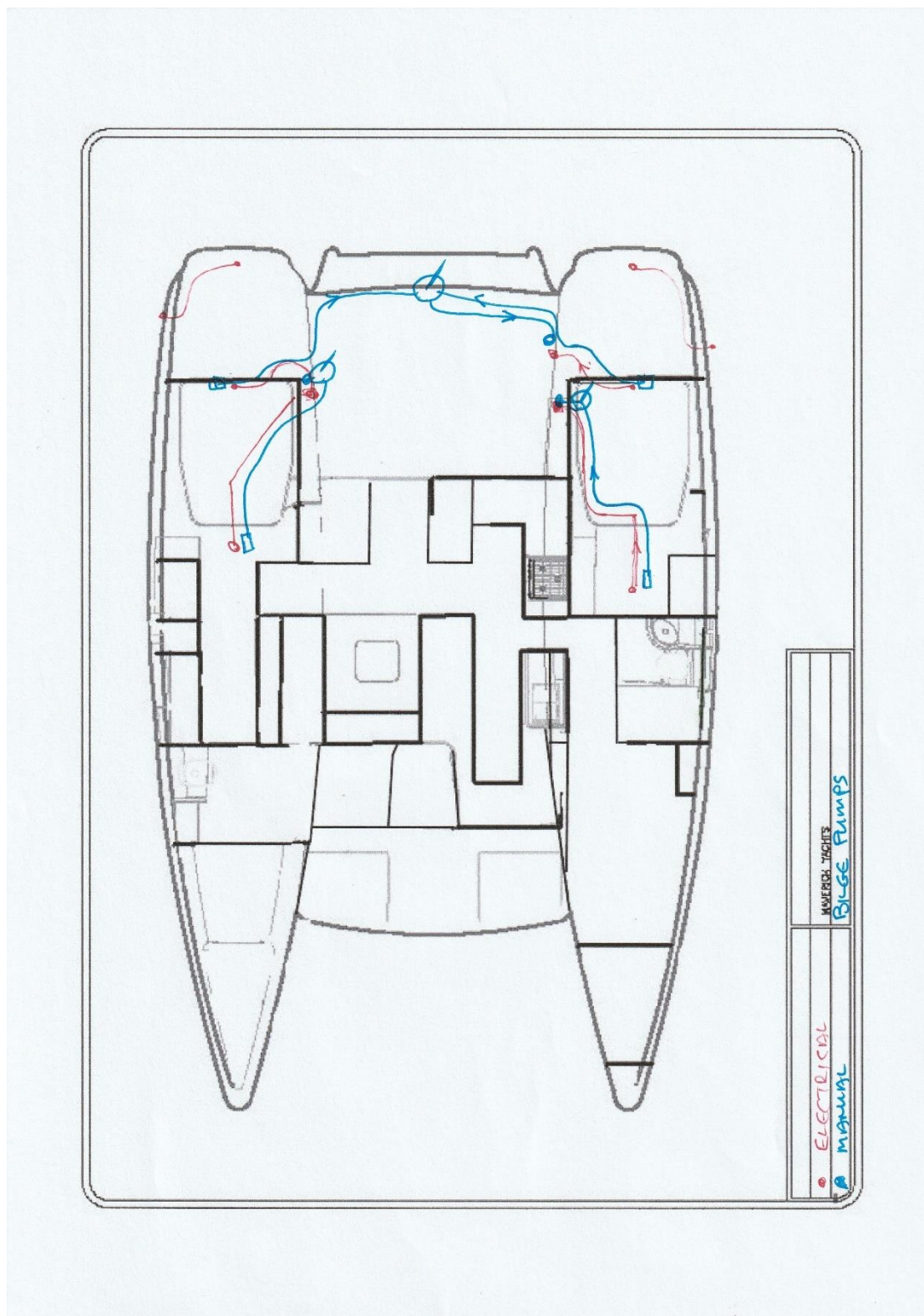
Open flap of bilge pump

Insert handle into aperture and pump using long and even strokes.

OPERATOR MAINTENANCE

- Periodic inspection of bilge pump base plate strainers for obstructions or blockages.
- Manual bilge pumps are essentially maintenance-free, but should be tested periodically to
Ensure good operation.
- Periodically inspect all bilge hosing for punctures and pinched areas.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.



MAVERICK YACHTS

MAVERICK 440

BLACK WATER AND TOILETS

DESCRIPTION

- There are two independent black water systems for Port and Starboard hulls respectively.
- The port and starboard black water systems supports **electric** and fresh saltwater toilets.

CAUTION: refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures **electric toilets**.

- Serving the stbd toilet is a black water holding tank, an electric pump empties it or it can be emptied via the deck connection.
- The black water can be diverted through the “Y” valve and evacuates the tank via the “BLACK WATER OUTLET” valve directly into the sea, or via the black water holding tank and then out to sea.
- Dockside evacuation is via a “DECK WASTE” connection.
- The port black water tank is emptied by the deck connection or by gravity flow by opening the valve in the port aft cabin hanging locker.

SEA EVACUATION

- Open “BLACK WATER OUTLET” valve.

CAUTION;

- Black water discharge is generally prohibited within a 12 miles offshore limit and BLACK WATER OUTLET valve must lock closed.
- It is the owner’s/operator’s responsibility to be familiar with National Regulations related to discharge at sea.

OPERATOR MAINTENANCE

NOTE: Black water holding tanks should be emptied and flushed when your vessel is laid up for wintering.

MAVERICK YACHTS

MAVERICK 440

STOVE AND OVEN

DESCRIPTION

THE STOVE

- The stove is a two burner gas hob with an induction plate.
- To light the stove, turn the desired plate valve. Hold the valve in for a few seconds until flame is strong. Adjust flame to desired heat.



WARNING:

- Do not use the stove when high angles of rolling or sustained angles of heel are likely.
- Do not fit free-hanging curtains or other fabrics in the vicinity of, or above, cookers or other open-flame devices.
- Never leave the craft unattended when cooking and/or heating appliances are in use.
- Never modify any of the craft's systems (especially electrical, fuel and gas) or allow unqualified personnel to modify any of the craft's systems.
- Never fill any fuel tank or replace gas bottles when machinery is running, or when cooking or heating appliances are in use.
- Never smoke while handling fuel or gas.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

REMOVAL OF APPLIANCE

- Ensure that gas supply valve is closed.
- Disconnect gas pipe.



WARNING: Refer to **STOVE AND GAS SUPPLY** section in this manual for guidance regarding safe operation of this appliance.

MAVERICK YACHTS

MAVERICK 440

REFRIGERATION

DESCRIPTION

REFRIGERATOR / FREEZER

- The refrigerators and freezers are located in the galley.
- It operates on 24 Volts.
- The switch is located on the main DC switchboard.

OPERATION

- Switch on refrigerator/freezer breaker on DC switch panel.
- Set "ON" and desired temperature on thermostatic control switch inside refrigerator.
- To conserve energy and batter power, the refrigerator should not be opened for longer than required.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

MAVERICK YACHTS

MAVERICK 440

L P GAS SUPPLY

DESCRIPTION

- The gas cylinders are situated in a self-draining locker on the port forward deck. Gas is connected via a regulator on the bottle and flexible hose to the gas solenoid.
- The gas solenoid isolator switch is situated on the DC panel and must be in the “ON” position if the oven or hob is to be used.
- The gas solenoid light will be on (orange) if the switch on the DC panel is on.

OPERATOR MAINTENANCE.

- The Gas System, including bottles, valves and hoses must be periodically checked for integrity and condition. Check all connections for leakage by:

Manual leak testing, or

Testing with soapy water or detergent solution (with appliance-burner valves closed and cylinder and system valves open).
- If leakage is present, close the cylinder valve and have the system repaired before further use.
- System repairs should be carried out by a competent person.

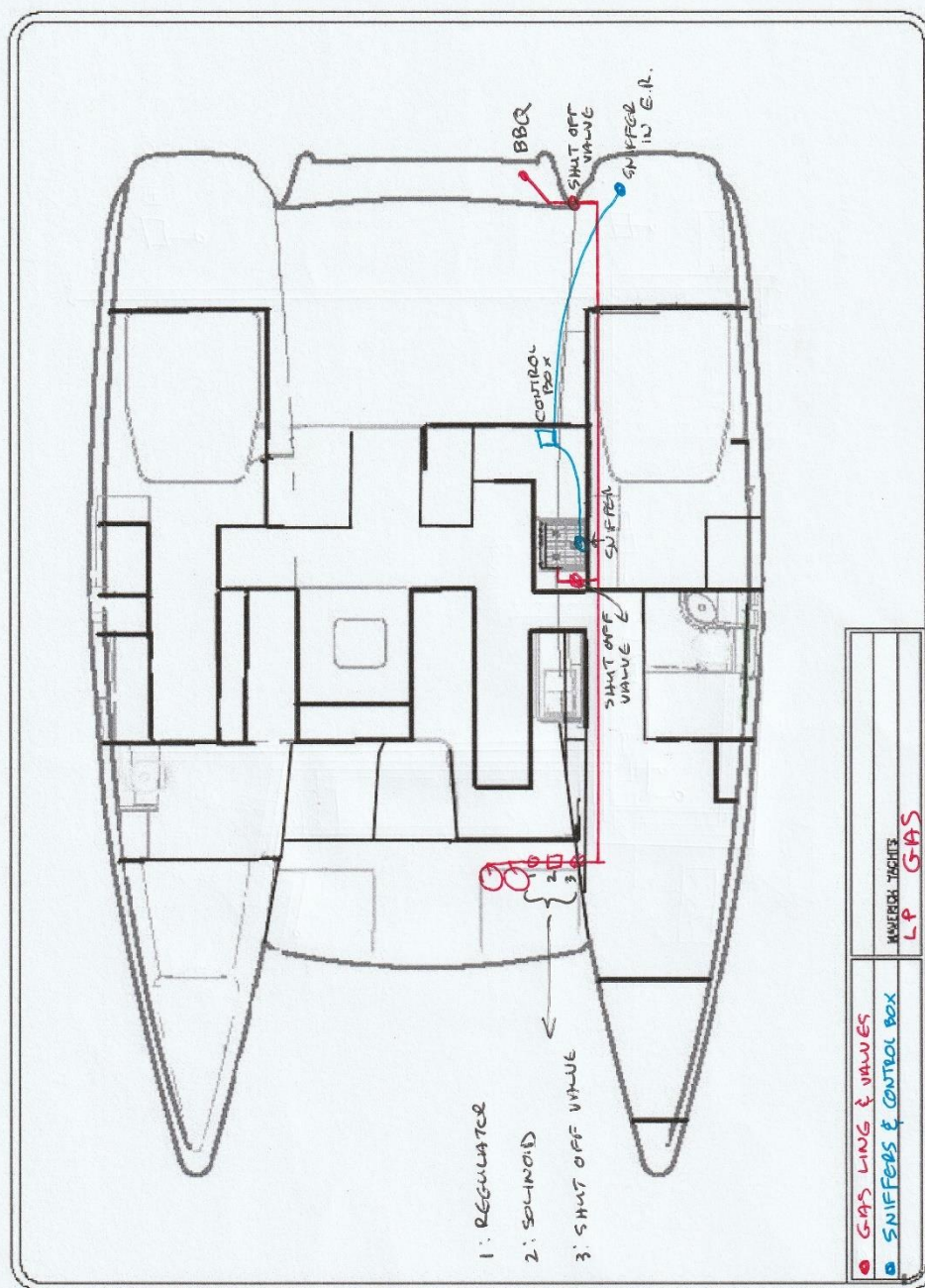


SAFETY WARNINGS:

- Always close the manual valves when the gas is not in use.
- In an emergency, close the manual valves on the bottles. Do not rely on the solenoid valve.
- Make sure the valves on the stove are closed before opening the manual valves and the solenoid valve.

- Never use a flame to find a leak.
- Ammonia can corrode copper. Do not use solvent or liquid containing ammonia on the copper pipes as a leak may occur at a joint.
- When a gas appliance is in use, it burns up oxygen and gives off other gases, such as carbon monoxide. There must be adequate ventilation when gas-burning appliances are used.
- Keep the valve closed on empty cylinders. Empty cylinders must be left in the locker or on deck. Keep protective covers, caps and plugs in place.
- Never leave gas appliances in operation or gas cylinder master valves open when no one is on board.
- Do not smoke when changing bottles.
- Gas cylinders should be checked annually and should be changed if damaged or corroded.
- The gas regulator is pre-set and should not be altered in any way. It should be checked annually by a qualified gas technician.

DANGER: GAS SYSTEMS ARE A POTENTIAL HAZARD UNLESS PROPERLY OPERATED.



MAVERICK YACHTS

MAVERICK 440

WINCHES

DESCRIPTION

- All winches LEWMAR winches are manually operated, with the exception of three electrically operated ones located to port and starboard side of the cockpit, operate able from the helm station.

OPERATOR MAINTENANCE

- See equipment manufacturer's manual.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

CAUTION:

- **Electric winches are extremely powerful and provide little or no feedback to indicate their loading. Please ensure that competent crew operate this equipment.**
- Failure to apply caution when using electric winches, particularly on peripheral gear, such as davits, preventer's et al, could cause damage and/or injury to operator.

MAVERICK YACHTS

MAVERICK 440

WINDLASS

DESCRIPTION

The windlass is a 1000W Quick Hector horizontal electric unit with one chain and one rope capstan.

Standard equipment includes:

70m chain c/w Rocna 33kg anchor.

10m chain spliced onto 50m rope c/w 10kg Danforth anchor.

The windlass is situated forward of the mast base. The windlass operates in the forward and reverse or “up” and “down” modes. This winch is used for raising and lowering the anchor chain.

OPERATION AND MAINTENANCE

- Check that the windlass breaker is on.
- Ensure the anchor rode to be used is free to run or be retrieved. All locking and/or safety devices must be removed and the chain, rope and anchor are free to move.
- Press the “UP” or “DOWN” buttons as required.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

CAUTION:

- **Electric winches are extremely powerful and provide little or no feedback to indicate their loading. Please ensure that competent crew operate this equipment.**
- Failure to apply caution when using electric winches could cause extensive damage and/or injury to the operator.

MAVERICK YACHTS

MAVERICK 440

MOORING AND ANCHORING

DESCRIPTION

- Mooring: Mooring equipment includes 8 mooring warps, 6 fenders and sufficient mooring and other cleats to safely moor your vessel in any situation.
- Anchoring: The windlass is a 1000W Quick Hector horizontal axis electric unit with one chain and one rope capstan. Standard equipment includes:

70m chain c/w Rocna 33kg anchor.

10m chain spliced onto 50m rope c/w 10kg Danforth anchor

- The windlass is situated forward of the mast base. The windlass operates in the forward and reverse or “up” and “down” modes. This winch is used for raising and lowering the anchor chain.

OPERATION

Mooring:

The boat, when tied up, should not be able to move off in such a way as to damage the hull. Adequate numbers of fenders are to be tied to the rail to prevent damage. All fenders are to be inflated correctly – not too hard. Mooring lines are to be checked regularly.



WARNING: keep well clear of any moving anchoring gear as fouling can result in serious injury to operator.

OPERATOR MAINTENANCE

- Mooring:

Check mooring warps regularly for chafe.

Keep fenders clean and well-inflated at all times.

- Anchors and rode:

After use, thoroughly wash down anchoring equipment, preferably with fresh water.

Regularly check all shackles for good condition and seizing.

Regularly check chain and rope condition.

Windlass:

Refer to manufacturer's maintenance manual.

NOTE: Poorly maintained anchoring equipment could result in loss and damage to both equipment and vessel. Regular maintenance is essential for your own safety and that of your vessel.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and maintenance procedures.

MAVERICK YACHTS

MAVERICK 440

HATCHES AND PORT LIGHTS

DESCRIPTION

- All port lights, deck and escape hatches are LEWMAR and rated for ocean vessel per EC Regulations according to application.
- Hatch Analysis:
 - Size 60 LEWMAR med profile
x 6
 - Size 44 LEWMAR med profile
x2
 - Size 30 LEWMAR med profile
x 4
 - Size 40 med profile cast frame escape hatch
x 1
 - Size 3 LEWMAR Standard Port Light
x 2
 - Size 4 LEWMAR Standard Port Light
X 2
 - Size 1 LEWMAR Standard Port Light
x 2
 - Size 0 LEWMAR Standard Port Light
x 7

OPERATION

- Operate per manufacturer's instructions.

NOTE: Ensure all hatches and port lights are properly shut when operating vessel in foul weather, when cleaning, wintering or when vessel is locked and unattended. Failure could result in damage to your vessel.

OPERATOR MAINTENANCE

- Maintain all hatches and port lights per manufacturer's instructions.

CAUTION: Refer to OEM Instruction Manuals for detailed description, operation and procedures.

MAVERICK YACHTS

MAVERICK 440

GENERAL CLEANING AND MAINTENANCE

INTRODUCTION

The intention of this section is to indicate areas that should be inspected regularly to ensure the efficient and safe operation of the vessel.

In all cases the instructions given in the supplied equipment manuals must be followed in order to maintain the warranty/guarantee of the specific item.

The Vessel is manufactured in accordance with the European Recreational Craft Directive 94/25/EC and is CE Certified in Design Category A.

For technical details and operating instructions, refer to the relevant sections of this Owners' Manual and the specific equipment Instruction Manual.

CLEANING

The following is a summary of the cleaning methods and materials recommended by or prohibited for use on Maverick Catamarans. We recommend the use of 3M Marine's Reconditioning and Maintenance Products. These products are specifically designed for fibreglass boats used in the marine environment.

The use of the following recommended 3M marine products will help maintain your boat to the highest standards:

- 3M Marine Multi-Purpose Boat soap.
- 3M Marine Protective Liquid Wax.
- 3M Marine Ultra Performance Paste Wax.
- 3M Marine Clean & Shine Wax.
- 3M Marine Metal Restorer and Polish.
- 3M Marine Outdoor Vinyl Cleaner.
- Conditioner & Protector
- 3M Marine Aluminium Restorer & Polish.

a. Interior and Exterior GRP Surfaces.

In order to maintain the factory new appearance of the boat, all fibreglass surfaces should be cleaned regularly. Normal accumulations of surface dirt should be removed by simply rinsing with fresh water. The exterior deck surfaces should be rinsed down with fresh water after every trip to prevent the build up of crystallized salts. To remove dirt, grease and oil, use 3M Marine Multi-Purpose Boat Soap. Ensure that you follow the manufacturer's directions for mix ratios and application instructions.

Exterior fibreglass surfaces should be waxed twice a year with 3M Marine Protective Liquid Wax or 3M Marine Ultra Performance Paste Wax to protect against Ultra Violet degradation (chalking) and to maintain a deep shine on the exposed surfaces. Apply according to the manufacturer's instructions recommended for each product.

In order to maintain and enhance the shine between wax applications, apply 3M Marine Clean and Shine Wax after each washing. This product can simply be sprayed on and then wiped off.

b. Acrylic Port Lights, Windows and Hatches.

- First rinse off with fresh water and then wash all Port lights, windows and hatches with 3M Marine Multi-Purpose Boat Soap. Use a clean, soft cloth and apply only light pressure. Rinse with clean, fresh water and dry by blotting with a slightly damp cloth or chamois.
- Never use window-cleaning sprays, scouring materials or solvents, such as Acetone, Benzene or Lacquer Thinners on acrylic materials.
- If masking tape is put on to acrylic material, it must be removed as soon as practicable as the glue could cause dulling of the acrylic surface.
- Acrylic materials can be polished to a high grade finish and slight scratches removed. We recommend the use of McGuire's Mirror Glaze No 17. Polishing should be done by hand as excess heat generated from machine polishing could cause distortion of the acrylic material and subsequent water leaks.

c. Vinyl, Upholstery Fabric and Carpeting.

- All interior vinyl, upholstered panels and carpeting should be regularly cleaned. Any spills should be cleaned immediately to prevent possible permanent staining. The carpets should be regularly vacuumed to remove dirt before it becomes trodden into the material.

- Regular cleaning with 3M Marine Multi-Purpose Boat Soap diluted as per the manufacturer's instructions is recommended. In order to remove stubborn marks and stains, moderate scrubbing with Scotch Brite No 63 Cleansing Sponge will loosen the mark or stain. This must be tested on a sample of material before commencing to use in visible areas. To restore and protect vinyl, apply a coat of 3M Marine Outdoor Vinyl Cleaner, Conditioning and Protector. This will build up a barrier against normal dirt and stains and will retard UV damage.

CAUTION: The following material must never be used on any vinyl, upholstered panel, carpeting or fibreglass surface:

- Household bleach or any cleaning agent containing bleach.
- Household cleaners containing ammonia
- Alkaline cleaners
- Washing soda
- Caustic soda
- Abrasive cleaners
- Hydrogen peroxide
- Acetone
- Acetate thinners
- Scouring pads

d. Electrical Systems.

The batteries, terminals and cables should be inspected on a regular basis for signs of damage, corrosion, cracks and electrolyte leakage. Battery terminals should be kept clean, tightly connected, greased and protected from accidental short-circuiting. Refer to separate instructions in the Owner's Manuals including wiring diagrams.

e. Plumbing Systems.

- All pumps and float switches should be checked frequently to ensure proper operation. This is an especially important regular maintenance item, since the proper functioning of a pump could save the vessel from serious damage in the future.
- Inspect all hoses for chafing and damage. Ensure that all hose clamps are tight. Check that all pump impellers are clean and free of obstructions.

- Inspect electrical wiring for corrosion and ensure that float switches move freely and are operational.
- Make sure that the manual bilge pump handles are available and securely located in the mounting brackets provided.

f. Winch Maintenance.

Follow the maintenance instructions specified by the winch manufacturer. The winch should be cleaned and lightly greased annually.

g. Deck Hardware and Stainless Steel.

PLEASE NOTE:

STAINLESS STEEL IS NOT A MAINTENANCE FREE PRODUCT, IT NEEDS TO BE CLEANED

Environmental conditions have a dramatic effect on the stability of surface finishes. Industrial pollution, high humidity, sea air and acidic rain can cause a finish to deteriorate and oxidize. If oxidation is present, clean with a stainless steel polish.

Check all fittings regularly to make sure that all screws are tight.

- Occasionally lubricate moving parts, such as blocks, turnbuckles, locking cleats, snatch blocks and track slides.
- Inspect mooring cleats and fairleads for security and tighten as necessary. If cleats or fairleads are damaged or worn, they should be replaced.
- Damaged or missing cotter pins in turnbuckles or shackles should be replaced.
- The majority of hardware and fittings installed on the boat are stainless steel. In order to maintain the original shine and help prevent corrosion, regular rinsing with fresh water and washing with 3M Multi-Purpose Boat Soap is necessary.
- In cases of surface rust, oxidation and tarnishing of the metal surface, the use of 3M Marine Metal Restorer and polish will restore the original lustre and protect against future surface defects.
- Never use coarse abrasives like sandpaper or steel wool, as these may actually cause rust and corrosion.
- Never clean with acids or cleaning materials containing bleaches or ammonia and leave any stainless steel in contact with iron, steel or other metals which can cause surface contamination.

h. Rigging.

- Rigging is subject to fatigue and wear and must be carefully inspected and maintained. A regular inspection for wear, discolouration, loose wires and chafing should be conducted. The frequency should be determined by the usage of the vessel.
- Always rinse the rigging with fresh water after sailing. Salt deposits can create corrosion, pitting, cracking and general deterioration.
- Clean rigging with CHLORINE-FREE water-soluble detergent and non-abrasive cleaning equipment.
- Inspect rigging for stains. Rust stains can indicate areas of stress, corrosion or cracking. Remove stains with Synthetic or brass pads – never use steel wool.
- Inspect for broken wires and replace as necessary.
- Do not mix stainless steel and galvanised metals on cables, fittings and pins, etc. Mixing dissimilar metals will cause rapid deterioration due to the effects of electrolysis.
- If rigging is removed for any reason, it must be stored in a dry place – never in plastic bags or plastic wrapping.

i. Electrolysis and Galvanic Protection.

- Salt water allows electric current to flow from anodic to cathodic materials. The relative position of two metals on the Galvanic Table determines which material (the Anode) will lose material and which will remain largely unchanged (the Cathode).
- The rate of wear is determined by the distance between the two metals on the galvanic table. For this reason sacrificial Zinc anodes are fitted to the sail drive of each engine to attract any stray electrical current away from the propellers.
- The rate of electrolysis, and therefore the speed at which the sacrificial anodes deteriorate, varies greatly and is affected by, amongst other things, the quality of the water and the amount of galvanic protection on boats berthed in the immediate vicinity of the vessel.
- Any work being done, i.e. welding on surrounding boards, will greatly increase the risk of electrolysis.
- The risk of galvanic corrosion is greatly increased if any surrounding boats are connected to shore power and they have any neutral or ground faults in their electrical wiring systems.
- Your vessel is protected to the highest standards and, as long as the sacrificial anodes are inspected regularly (minimum every 3 months) and replaced as required, no problems should be experienced.

j. Engines.

- Refer to the Lubrication and Servicing Instructions in the engine manufacturer's operating manual.
- A regular visual inspection of all engine fittings, pipes and wiring must be carried out. Any signs of wear, chafing or loose parts must be corrected.
- Check the tightness and wear on all engine belts and replace, if necessary.

k. Routine Maintenance.

- Routine maintenance should include items based on how frequently the vessel is used, i.e. engine hours (on calendar dates), and EXPIRY dates of flares and servicing of fire extinguishers.
- Other items to be checked on a regular basis include oil level and oil and fuel filters.
- The operation of seacock's and valves should be inspected to ensure free and easy operation in case of emergency.
- The gas system pipes and fittings should also be regularly checked for wear and tightness.
- It is recommended that the checklists for routine maintenance found in the Owner's Manual be used as a basis for a regular routine maintenance plan and include them as part of the ship's log.

l. Sails.

- Check all sails regularly for chafe and wear, especially where they can contact deck fittings or rigging, at reef points, batten sleeves and the foot of the head- sail.
- Sail batten pockets should be inspected regularly, especially where they can chafe against the shrouds.
- Sails should be protected, when they are not in use, from the effects of ultra violet radiation.
- Mildew can be prevented by hand washing the sails with mild soapy water and drying before storage.
- Regular inspection of running rigging, halyards, sheets and reef lines for chafe and damage is recommended.

- Replace any damaged or chafed lines, as required.

m. Anti-Fouling

- The vessel has been painted with International Micron anti-fouling in accordance with the manufacturer's recommended application procedures.
- The anti-fouling should be checked on a regular basis and repaired or recoated, as required, depending on usage, storage and possible damage.
- The use and compatibility of a different type of anti-fouling paint over the existing coating should be checked with the manufacturer prior to application.
- The anti-fouling must be applied in accordance with the manufacturer's instructions. No guarantees can be given by Maverick Yachts cc.
- Under no circumstances must the hull be sanded, ground or have any form of abrasive preparation which could void the anti-osmosis guarantee.

n. Storage and Winterisation.

- If the vessel is to be taken from the water and stored for any extended period then the following must be applied:
 - The vessel must be lifted and supported as indicated in the relevant section of the Owner's Manual and shown on the lifting, transport and storage drawings.
 - The sails should be removed, cleaned, dried, correctly folded and stored in a dry well-ventilated area.
 - Disconnect and remove batteries.
 - All cushions and mattresses should be removed and stored in a clean, dry area. If this is not possible, then they should be stored vertically on the boat to allow adequate airflow around the cushion to prevent mildew.
 - If the vessel is to be stored in areas subject to ice and snow, then tenting or shrink-wrapping the deck will prevent ice build-up from damaging the hatches and port lights.
 - In cold areas, ensure that the engine coolant water is drained or contains anti-freeze.