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# Moody

## OWNER'S MANUAL

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## *Introduction*

Moody yachts are manufactured by Marine Projects (Plymouth) Limited. High quality raw materials are used throughout and all major components are manufactured to strict tolerances to allow for easy replacement and repair during the yacht's life. Strict quality control exists during the manufacture of all yachts. All ancillary components such as hatches, winches, pumps, etc. are supplied by manufacturers with a proven record of quality and reliability.

All specifications given in this handbook are given in good faith. Marine Projects (Plymouth) Limited implement a policy of continual development and therefore reserve the right to improve the specification without notice. The specifications given in this handbook supersede any previously stated specifications.

Marine Projects (Plymouth) Limited, their agents, distributors or publishers cannot be held responsible for any inaccuracies or omissions in this handbook or for any injuries to anyone, however caused, engaged in any activity involving a Moody yacht or its ancillary equipment either on land or in the water.

This manual is intended to give the owner a better understanding of the construction of a Moody yacht, the layout of its systems and how to service and maintain it to best effect.

*A well maintained yacht is ultimately more reliable and retains a higher resale value.*

## *Safety*

It is the duty of the skipper/owner of the yacht to ensure that the vessel and its crew are fit to go to sea. Information concerning safety at sea can be obtained from the Royal Yachting Association (RYA), HM Coastguards and the International Maritime Organisation (IMO), who provide guidance and booklets on the subject.

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# *Hull, deck gear & below decks*

## *Hull*

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Glass Reinforced Plastic (*GRP*) is used throughout the construction of the hull and decks. Hull stiffening is achieved using balsa or foam stiffeners moulded to the inside of the hull and by the fitting of bulkheads. Each bulkhead is bonded in position using *GRP* and then further secured with bolts through the *GRP* bonding. An inner *GRP* floor also adds to the strength and stability of the hull. Extra strengthening is also applied to the keel attachment area in order to withstand the loads imposed on the keel. Deck areas are surfaced with an integrally moulded non slip finish.

## *Keels*

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The following keel options are available:-

Yacht	Keel Options
Moody 31	Fin or Bilge
Moody 336	Fin or Bilge
Moody 35	Fin or Bilge
Moody 376	Fin or Scheel
Moody 425	Fin or Scheel
Eclipse 33	Fin or Bilge
Eclipse 38	Shoal
Eclipse 43	Shoal



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## Seacocks

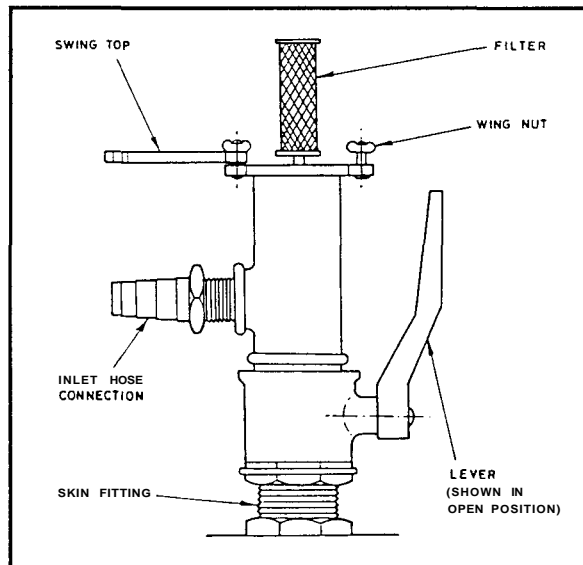
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Seacocks are fitted to all inlets and outlets which penetrate the hull below the waterline. The hull area around the penetration point is reinforced with an internal plywood backing plate which is resin coated and bedded on compound. With the exception of the engine cooling system inlet, all current Moody yachts are fitted with a ball valve combined with a skin fitting.

### *Water inlet seacock and strainer*

This type of seacock is fitted to the engine cooling system inlet and it is operated as follows:

- 1 To open - turn the knob anticlockwise
- 2 To close - turn the knob clockwise

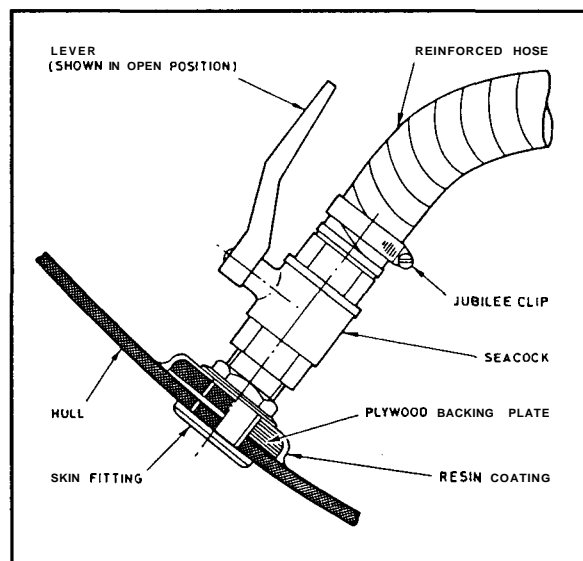


### *Water inlet seacock and strainer*

### *Skin fitting/seacock*

This type of seacock is used for sink, shower and cockpit drains and marine toilet inlet and outlets. It is operated as follows:

- 1 To open - turn the lever to align with the inlet/outlet hose.
- 2 To close - turn the lever until it is at right angles to the inlet/outlet hose.



### *Skin fitting/seacock*

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### ***Cathodic protection***

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All yachts are fitted with hull mounted sacrificial anodes as these give the best results. These are usually mounted in the region of the engine compartment to keep the bonding cable run to a minimum.

### ***Attachment***

This is achieved by using studs permanently fixed to the inside of the hull to which the anode is secured using nuts and locking washers.

### ***Bonding***

Bonding cables are internally attached to the mounting studs. The anode is bonded to the engine, stern tube, rudder stock and 'P' bracket. There is no requirement for the more remote skin fittings and seacocks or the keel mounting bolts to be protected.

### ***Hatches and portlights***

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All yachts use the following range of **Lewmar** hatches and portlights;

#### ***Moody 31***

Quantity	Type	Manufacturer	Model No.	Size (")
2	<b>Portlight</b>	<b>Vetus</b>	<b>PT100 (White)</b>	<b>12 3/8 x 5 1/2</b>
1	Hatch	Lewmar	<b>86005S</b>	19 3/4 X 19 3/4

#### ***Moody 336***

Quantity	Type	Manufacturer	Model No.	Size (")
1	Portlight	Lewmar	8906	4x10
1	<b>Portlight</b>	Lewmar	8912	<b>5 x 12</b>
2	Portlight	Lewmar	8932	5x15
2	Hatch	Lewmar	<b>82005S</b>	7 3/4 X 13 3/8
1	Hatch	Lewmar	<b>86005S</b>	<b>19 3/4 x 19 3/4</b>
1	Hatch	Lewmar	<b>83005S</b>	15 5/8 X 17 3/4

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*Moody 35*

Quantity	Type	Manufacturer	Model No.	Size (")
1	Portlight	Lewmar	8902	4x10
2	Portlight	Lewmar	8941	5x23
1	Portlight	Lewmar	8912	5 x 12
1	Hatch	Lewmar	<b>83005S</b>	12 5/8 X 17 3/4
2	Hatch	Lewmar	<b>86005S</b>	19 3/4 x 19 3/4
2	Hatch Trim Kit	Lewmar	8776	n/a
2	Hatch Trim Kit	Lewmar	8775	n/a

*Moody 376*

Quantity	Type	Manufacturer	Model No.	Size (")
2	Portlight	Lewmar	8902	4x10
1	Hatch	Lewmar	82005S	7 3/4 X 13 3/8
2	Hatch	Lewmar	86005S	19 3/4 X 19 3/4
1	Hatchh	Lewmar	82005S	7 3/4 X 13 3/8

*Moody 425*

Quantity	Type	Manufacturer	Model No.	Size (")
4	Portlight	Lewmar	8941	5x23
1	Hatch	Lewmar	<b>82005S</b>	7 3/4 X 13 3/8
1	Hatch	Lewmar	<b>86005S</b>	19 3/4 X 19 3/4
2	Hatch	Lewmar	83005S	12 5/8 X 17 3/4
1	Hatch	Lewmar	87005S	24 1/2 x24 1/2

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### Eclipse 33

Quantity	Type	Manufacturer	Model No.	Size (")
1	Portlight	Lewmar	8902	4x10
1	Portlight	Lewmar	8912	5 x 12
2	Hatch	Lewmar	82005S	7 3/4 X 13 3/8
1	Hatch	Lewmar	86005S	19 3/4 X 19 3/4
2	Hatch	Lewmar	83005S	12 5/8 X 17 3/4

### Eclipse 38

Quantity	Type	Manufacturer	Model No.	Size (")
2	Hatch	Lewmar	83007S	12 5/8 X 17 3/4
3	Hatch	Lewmar	82007S	7 3/4 X 13 3/8
1	Hatch	Lewmar	86007S	19 3/4 X 19 3/4
1	Portlight	Lewmar	8932	5 x 15
1	Portlight	Lewmar	8912	5 x 12

### Eclipse 43

Quantity	Type	Manufacturer	Model No.	Size (")
1	Portlight	Lewmar	8941	5 x 23
1	Portlight	Lewmar	8912	5 x 12
4	Hatch	Lewmar	82005S	7 3/4 X 13 3/8
1	Hatch	Lewmar	87005S	24 1/2 x 24 1/2
2	Hatch	Lewmar	85005S	14 5/8 x 19 3/4

! **Hull mounted port lights must be kept closed and secured when underway. Aluminium**  
\* **deadlights are supplied for hull mounted portlights, a plywood deadlight is supplied for all transom windows.**

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## *Deck gear*

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### *Winches and windlasses*

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The following **Lewmar** winches are used:

Yacht	Genoa Sheets	Main Halyard	Genoa Halyard	Genoa Furling Line	Furling Mainsail Controls	Mainsheet	Mainsail Reefing Lines
Moody 31	L30c	L8c	'as main'	-	-	-	L6c
Moody 336	L40c	L8c	'as main'	L8c *	-	L8c	L6c
Moody 35	L40	L8c	'as main'	L8c *	-	-	L6c
Moody 376	L43c	L16c	L16c	L8c	L16cst	L8c	-
Moody 425	L52st	L30c	L40c	L8c	L16c	L16c	-
Eclipse 33	L40c	L7c	-	L6c	L6c	L6c	-
Eclipse 38	L46cst	L16c	L16c	L16cst	L16cst	L16cst	L16cst
Eclipse 43	L52cst	L30c	L40c	L16cst	L30cst	L30cst	-

\* Furling genoa not fitted as standard.

The following windlasses are offered as options:

Yacht	Option/model	Manufacturer	Chain Size
Moody 31	-	-	-
Moody 336	*Royal	Lofrans	8mm
Moody 35	*Royal *Seawolf 520	Lofrans Simpson Lawrence	8mm 5/16"
Moody 376	Royal *Seawolf 520	Lofrans Simpson Lawrence	8mm 5/16"
Moody 425	Royal *Seawolf 520	Lofrans Simpson Lawrence	10mm 9.5mm
Eclipse 33	Anchorman (gypsy only) *Power 700 (gypsy only -12V)	Simpson Lawrence Simpson Lawrence	5/16" 5/16"
Eclipse 38	Power 700 (gypsy only -12V)	Simpson Lawrence	9.5mm
Eclipse 43	Power 1000 (gypsy only -12V)	Simpson Lawrence	9.5mm

\* Not fitted as standard - 'Seawolf to be replaced March 1991.

### *Using the windlass*

It is recommended that your anchor chain is suitably marked to indicate the amount of chain you have out while at anchor.

When lying at anchor in a heavy swell the chain will snatch either causing chain slip or excessive loads to be applied to the windlass. For safety it is recommended that a rope bridle be applied to transfer the load to a cleat.

### *Below decks*

#### *Upholstery*

Your yacht has been upholstered with either the Christiana, Ravenna, Dash or Onyx range of materials. They all meet the Fire and Safety Regulation Act and have been tested to BS5852 PT1. For information on care of your upholstery refer to the maintenance section.

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## *Maintenance*

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### *Hull*

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Minor scratches and abrasions should be attended to in their early stages, initially by using a medium grade rubbing compound. If this is ineffective, rub the area lightly with 400 grade wet and dry paper (used with water) until the mark disappears. Smooth the area with 800 grade followed by 1200 grade (both wet) and then apply a silicone free wax polish.

Stress cracks should be looked at by an expert and some remedial action taken.

*f Rubbing with abrasive compounds and materials removes the gelcoat. As this is only a thin  
\* layer, great care should be taken.*

### *Annual cleaning*

Wash the hull annually with warm water containing a little detergent. Stubborn stains and polish should be removed with a recommended release agent or oil removing fluid. Polish the hull with a silicone free wax polish.

### *Seacocks*

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Check regularly:

- 1 Security of attachment
- 2 Security and condition of hose and hose clips
- 3 Free operation of the valve

### *Sacrificial anodes*

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The anode should be replaced when it is approximately two thirds eroded. If any doubt exists as to whether the anode will survive the season - change it! The core of the anode is a galvanised steel strip which provides the attachment lugs for the anode. The anode is removed by undoing the two securing nuts and washers. It is recommended that when replacing the anode, the nuts, washers and backing sheet are also replaced.

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### *Antifouling*

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Antifouling should be checked on a regular basis and replaced at least once a season. The antifouling used on your yacht is \_\_\_\_\_

### *Upholstery*

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#### *Cleaning*

Dust and grit should be removed frequently with a soft brush or the upholstery attachment of a vacuum cleaner.

#### *Creases*

Where creases occur, raise the pile by brushing with a clean, damp cloth. Do not saturate the fabric as the cotton backing may shrink. When dry, brush in the direction of the pile with a soft brush.

#### *Stains*

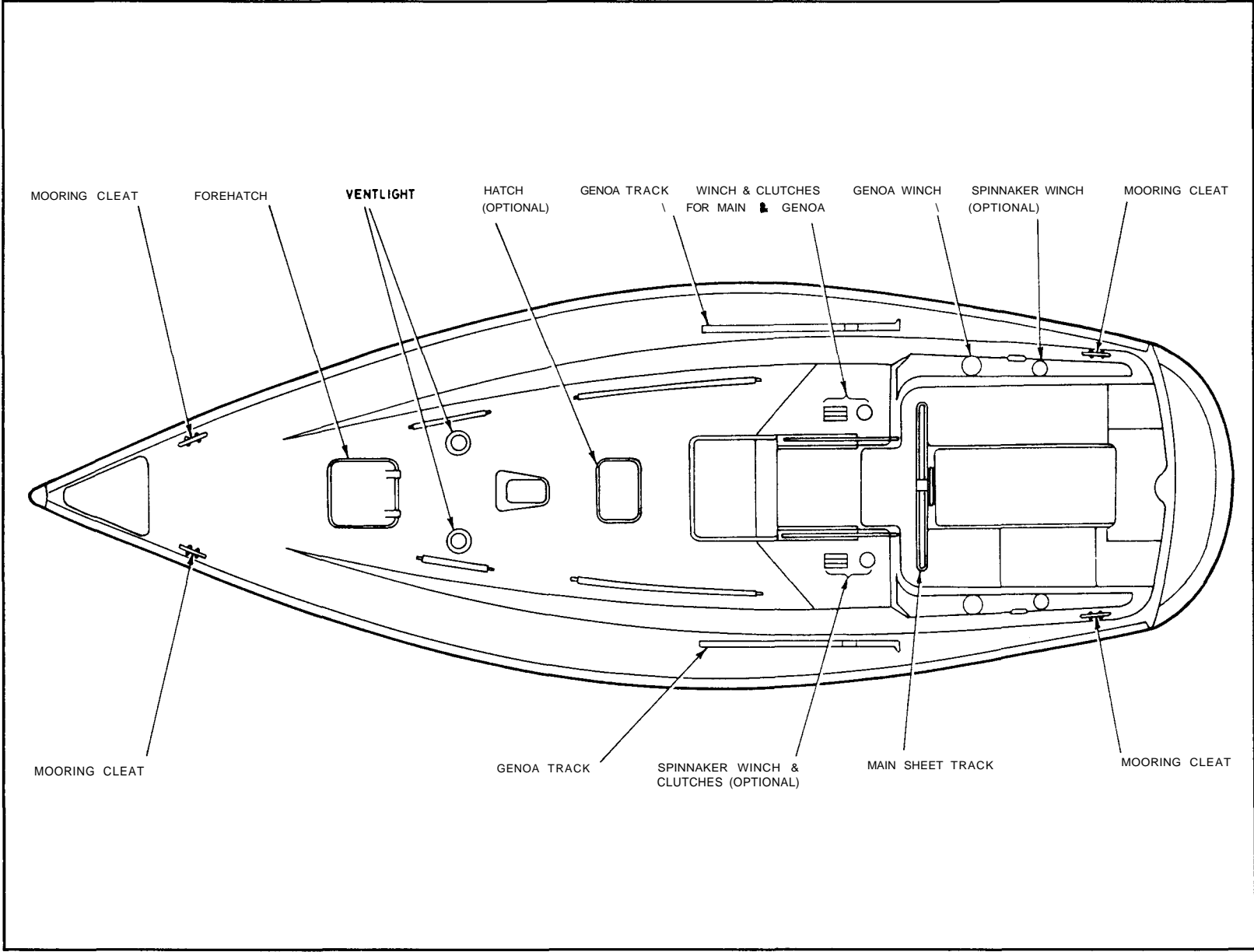
Take immediate action, the longer stains are left the more difficult it is to remove them. Nearly all stains can be removed by sponging lightly with warm water or a dry foam upholstery shampoo. If this is not effective, covers can be removed and dry cleaned. If heavily stained it is recommended that a reputable upholstery cleaner is called in.

### *Ventilators*

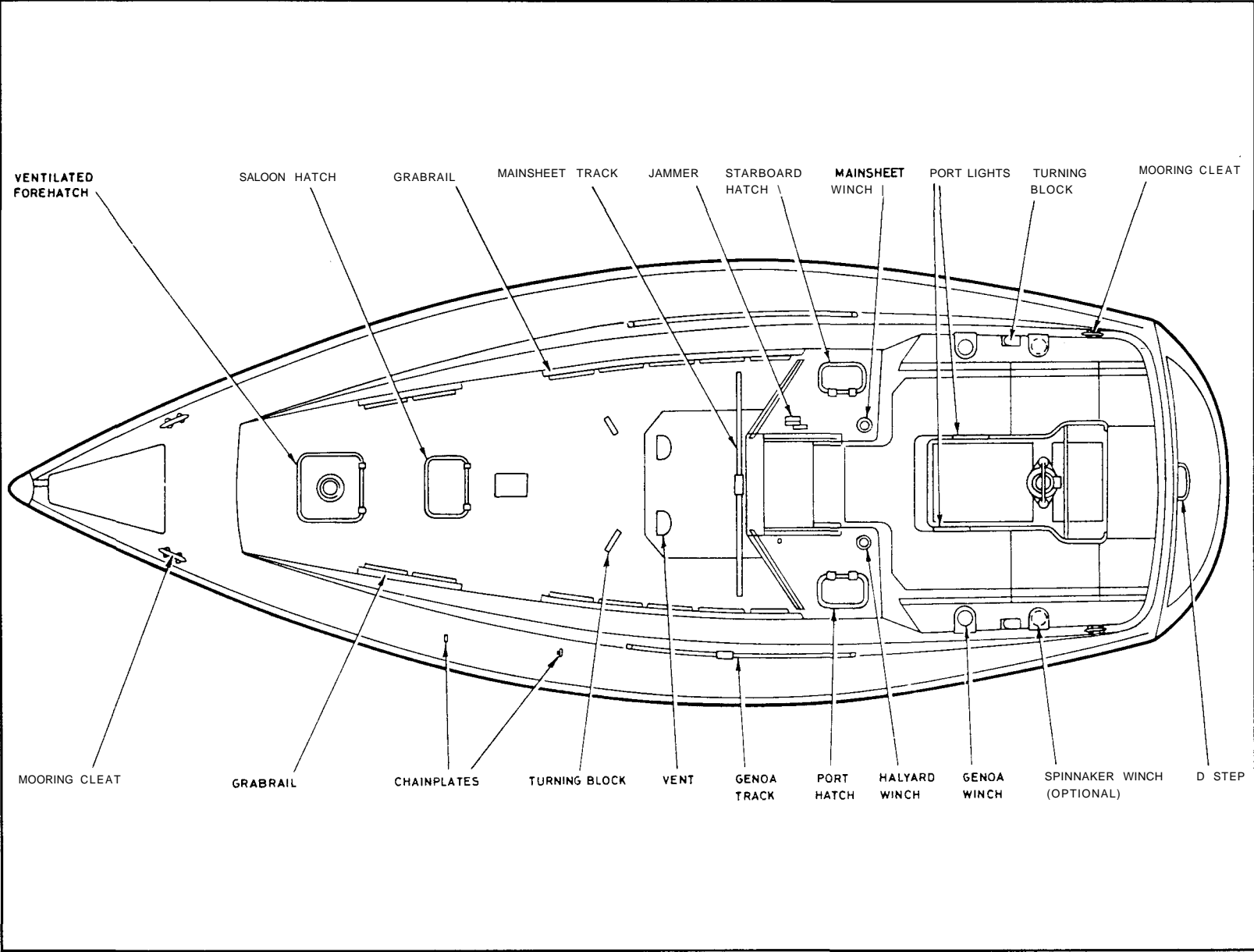
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Ensure that there is no entry of water through the deck seal. Reseal if necessary.

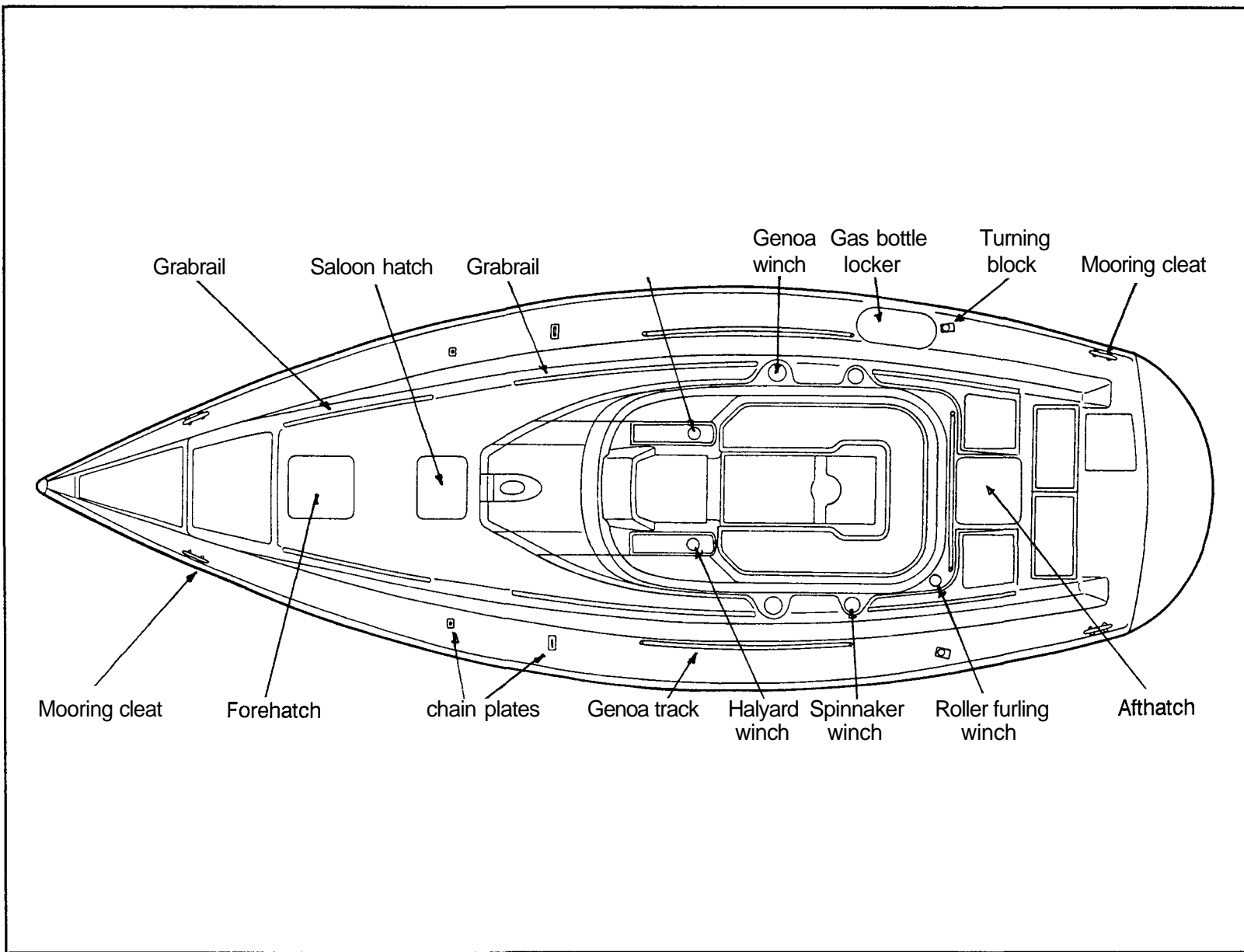




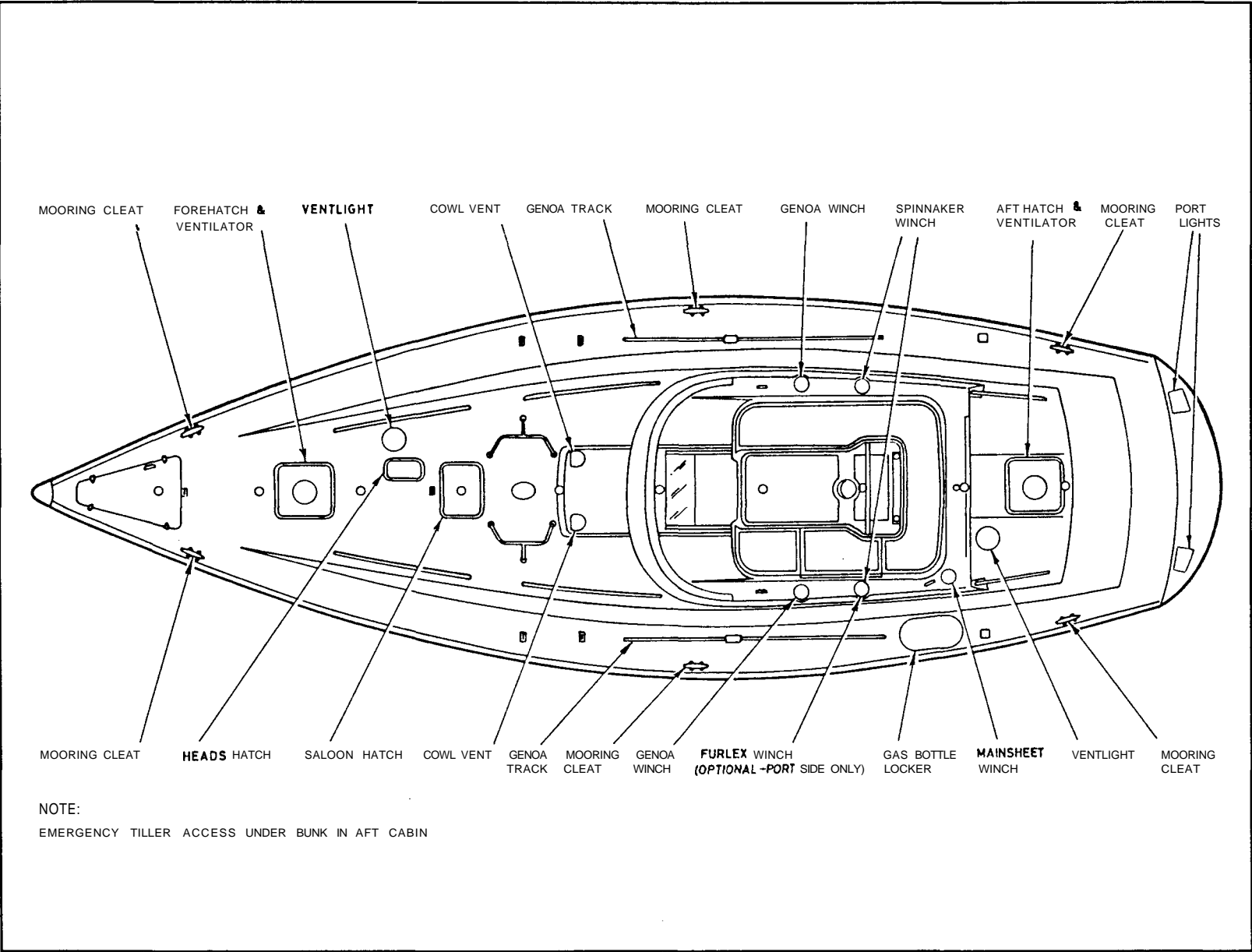
*Moody 31 Deck Plan*



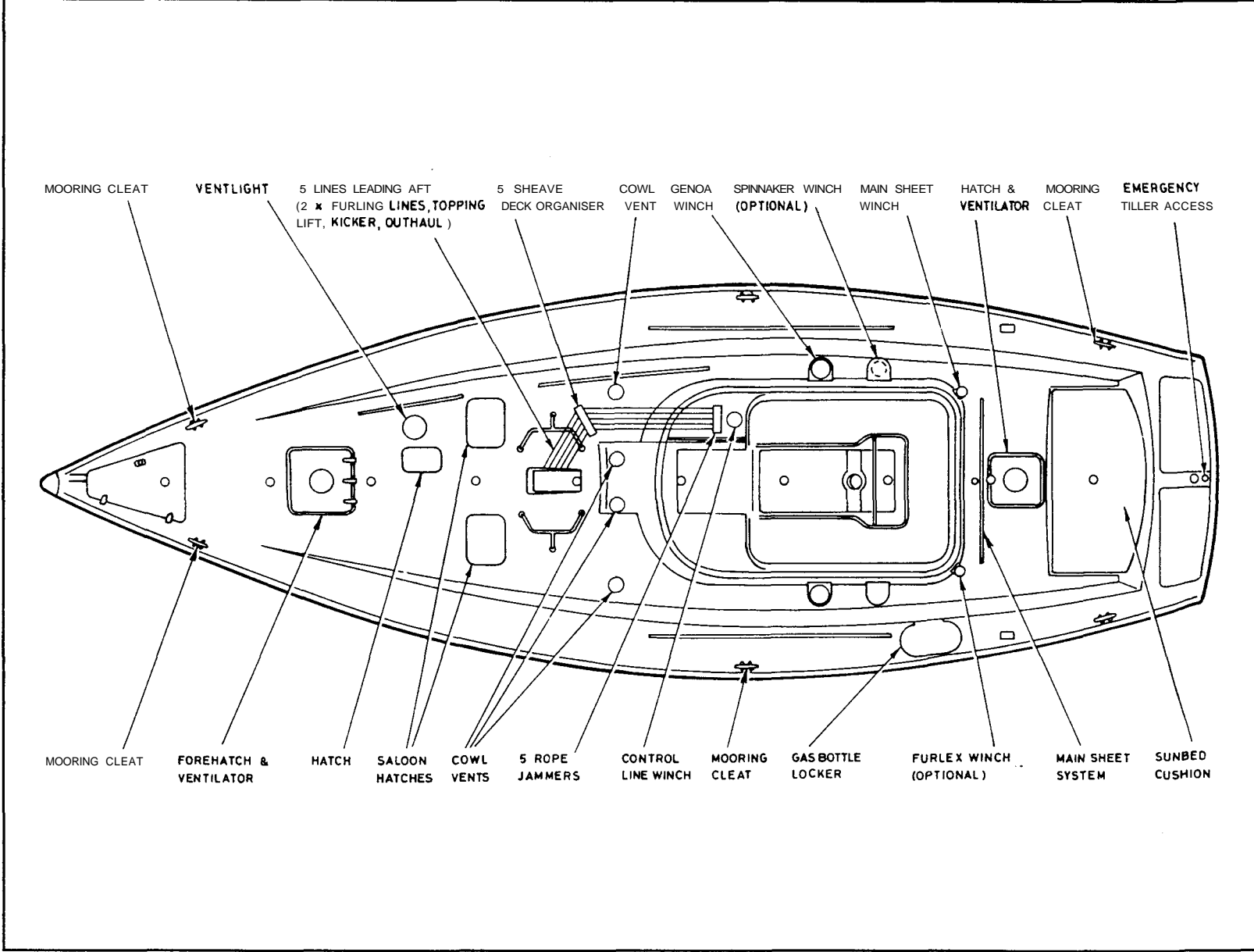
*Moody 336 Deck Plan*



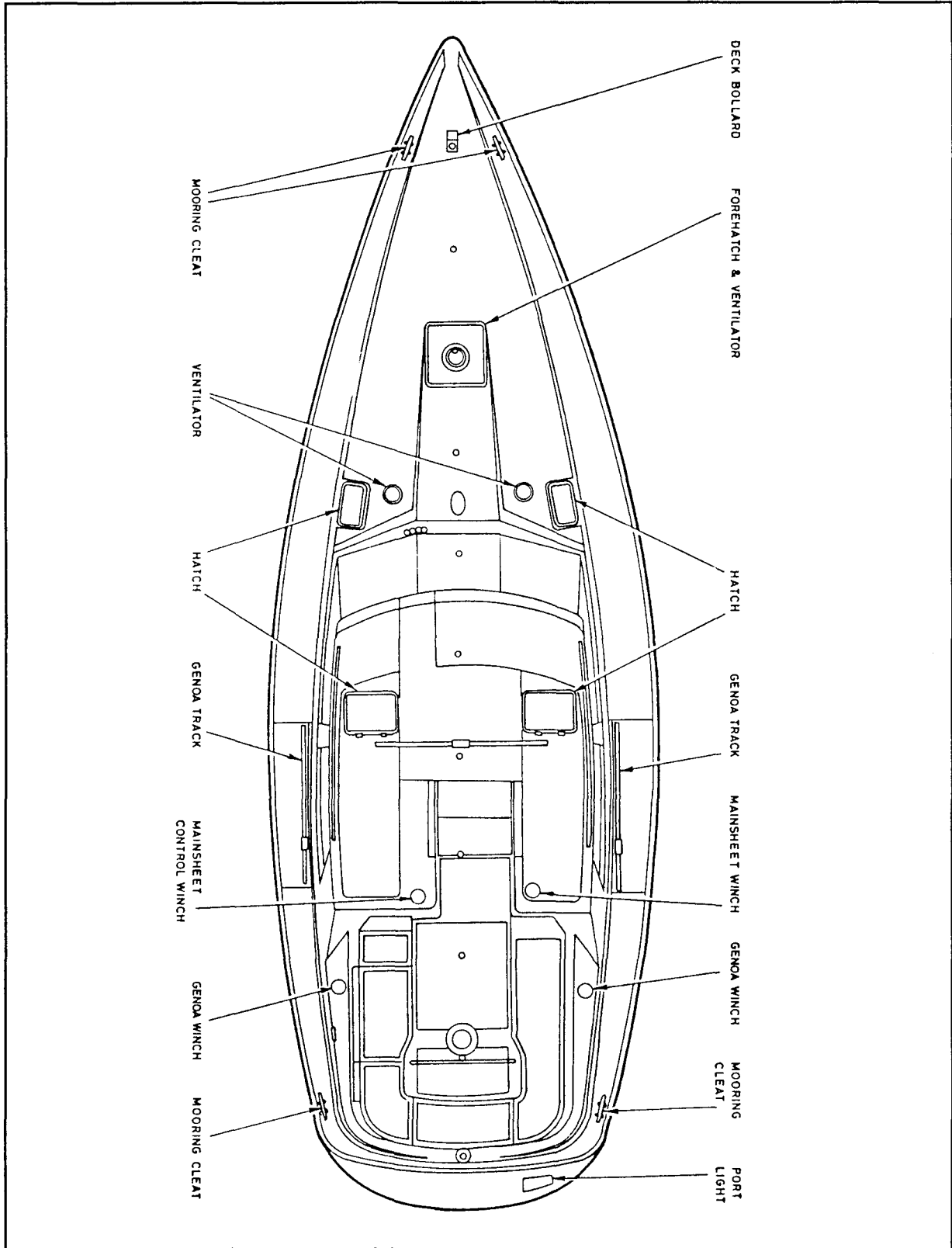
M 35 Deck Plan



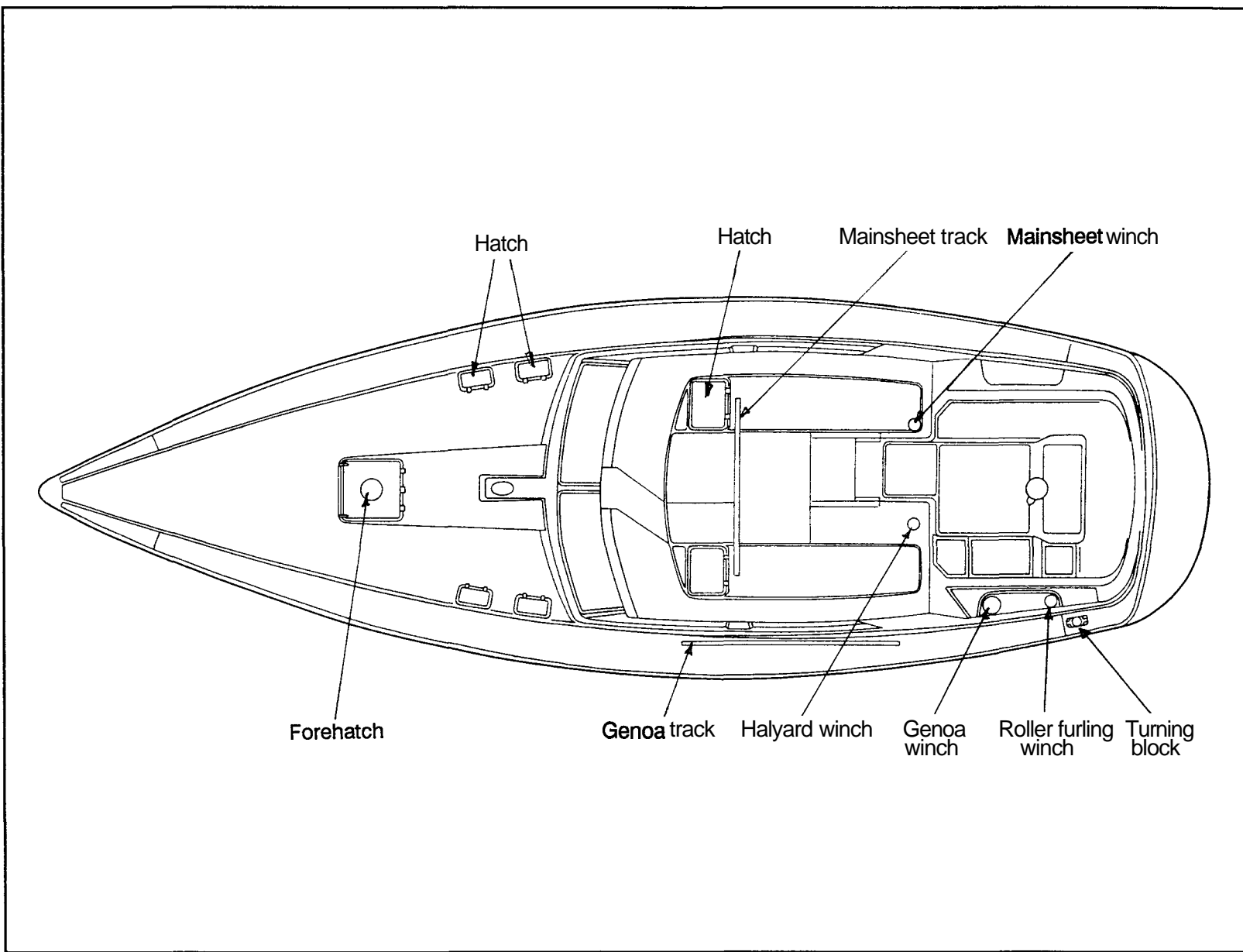
*Mo 376 Deck Plan*



*MoH 425 Deck Plan*



*Eclipse 33 Deck Plan*



*Eclij<sup>se</sup> 43 Deck Plan*

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# *Sails, spars & rigging*

## *Spars and rig*

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Your yacht is fitted with a Kemp aluminium mast and boom which, given good support, proper handling and caring routine maintenance, should be remarkably durable. Information on stepping the mast can be gained from the Kemp handbook supplied with the yacht.

## *Rigging*

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### *Standing rigging*

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The standing rigging is the only support provided for the mast and it is vital that it is adjusted and maintained correctly. In a seaway, if the rig is too slack, the mast head or spreader area can build up movement thereby increasing the shock loading on the stays. On the other hand, overtensioned rigging puts a higher total load on the stays and can be just as damaging. The entire standing rigging is stainless steel including all terminals, toggles, bottle screws and wire ropes. Some yachts are fitted with a furling headsail system and an in-mast furling mainsail system. For further information refer to 'Hints and advice on rigging and tuning your Kemp Mast', supplied with the yacht.

### *Rigging adjustment*

Stainless steel rigging stretches and should therefore be regularly checked and adjusted, particularly during the first season. It is recommended that reference be made to the instructions given in 'Hints and advice on rigging and tuning your Kemp Mast' supplied with the yacht.



**Moody 31**

STAY	QTY PER SET	TOP END FITTING	BOTTOM END FITTING	OVERALL LENGTH (M)
FORESTAY	1	Eye swaged	Fork	12.23
INNER FORESTAY	1	Tee	Rigging screw and roller	5.875
CAP SHROUD	2	Tee	Rigging screw and roller	11.51
INTERMEDIATE	0	Eye swaged, eye talurit and tee	Rigging screw, swageless and roller	0
FORWARD LOWER	0	Eye swaged, eye talurit and tee	Rigging screw, swageless and roller	0
AFT LOWER	2	Tee	Rigging screw and roller	6.115
BACKSTAY	1	Eye swaged	Rigging screw	12.64
BACKSTAY SPAN	0	Eye swaged, eye talurit and tee	Rigging screw, eye, fork and swageless	0

**Moody 336**

STAY	QTY PER SET	TOP END FITTING	BOTTOM END FITTING	OVERALL LENGTH (M)
FORESTAY	1	Eye swaged	Rigging screw	14.00
INNER FORESTAY	0	-	-	0
CAP SHROUD	2	Shroud	Rigging screw and roller	12.62
INTERMEDIATE	2	Shroud	Rigging screw and roller	9.025
FORWARD LOWER	2	Shroud	Rigging screw and roller	5.00
AFT LOWER	2	Shroud	Rigging screw and roller	5.00
BACKSTAY	1	Eye terminal	Rigging screw	14.50

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Moody 35

STAY	QTY PER SET	TOP END FITTING	BOTTOM END FITTING	OVERALL LENGTH (M)
FORESTAY	1	Eye swaged	Rigging screw	13.275
INNER FORESTAY	0	-	-	0
CAP SHROUD	2	Shroud	Rigging screw and roller	12.6
INTERMEDIATE	2	Shroud	Rigging screw and roller	9.01
FORWARD LOWER	2	Shroud	Rigging screw and roller	5.095
AFT LOWER	2	Shroud	Rigging screw and roller	5.0
BACKSTAY	1	Eye swaged	Rigging screw and roller	14.105

Moody 376

STAY	QTY PER SET	TOP END FITTING	BOTTOM END FITTING	OVERALL LENGTH (M)
FORESTAY	0	-	-	0
INNER FORESTAY	1	Shroud	Rigging screw and roller	4.58
CAP SHROUD	2	Shroud	Rigging screw and roller	14.07
INTERMEDIATE	2	Shroud	Rigging screw	9.52
FORWARD LOWER	0	-	-	0
AFT LOWER	2	Shroud	Rigging screw	4.9
BACKSTAY	1	Eye swaged	Rigging screw	15.445

*Moody 425*

STAY	QTY PER SET	TOP END FITTING	BOTTOM END FITTING	OVERALL LENGTH (M)
FORESTAY	1	Eye swaged	Fork	16.38
INNER FORESTAY	0	Eye swaged, eye talurit and tee	Rigging swrew, eye, swageless and roller	0
CAP SHROUD	2	Tee	Rigging screw and roller	15.55
INTERMEDIATE	2	Tee	Rigging screw and roller	10.76
FORWARD LOWER	2	Eye swaged, eye talurit and tee	Rigging screw, swageless and roller	6.04
AFT LOWER	2	Eye swaged, eye talurit and tee	Rigging screw, swageless and roller	5.96
BACKSTAY	1	Eye swaged	Rigging screw	17.05
BACKSTAY SPAN	0	Eye swaged, eye talurit and tee	Rigging screw, eye, fork and swageless	0

*Eclipse 33*

STAY	QTY PER SET	TOP END FITTING	BOTTOM END FITTING	OVERALL LENGTH
FORESTAY	0	-	-	0
INNER FORESTAY	0	-	-	0
CAP SHROUD	2	Shroud	Rigging screw and roller	11.913
INTERMEDIATE	2	Shroud	Rigging screw and roller	8.304
FORWARD LOWER	2	Shroud	Rigging screw and roller	4.418
AFT LOWER	2	Shroud	Rigging screw and roller	4.241
BACKSTAY	1	Eye swaged	Rigging screw	13.375

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*Eclipse 38*

STAY	QTY PER SET	TOP END FITTING	BOTTOM END FITTING	OVERALL LENGTH (M)
FORESTAY	0	-	-	0
INNER FORESTAY	0	-	-	0
CAP SHROUD	2	Shroud	Rigging screw and roller	13.97
INTERMEDIATE	2	Shroud	Rigging screw and roller	9.665
FORWARD LOWER	2	Shroud	Rigging screw and roller	5.37
AFT LOWER	2	Shroud	Rigging screw and roller	5.24
BACKSTAY	1	Eye swaged	Rigging screw	12.0

*Eclipse 43*

STAY	QTY PER SET	TOP END FITTING	BOTTOM END FITTING	OVERALL LENGTH
FORESTAY	0	Eye swaged, eye talurit and tee	Rigging screw, eye and swageless	16.63
INNER FORESTAY	0	Eye swaged, eye talurit and tee	Rigging screw, eye, swageless and roller	0
CAP SHROUD	2	shroud terminal	Rigging screw and roller	15.53
INTERMEDIATE	2	Shroud terminal	Rigging screw and roller	10.93
FORWARD LOWER	2	Shroud terminal	Rigging screw and roller	6.24
AFT LOWER	2	Eye swaged, eye talurit and shroud terminal	Rigging screw and roller	6.07
BACKSTAY	1	Eye swaged	Fork	13.60
BACKSTAY SPAN	2	Eye swaged	Rigging screw	4.22

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## *Running rigging*

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The running rigging comprises all the lines and relative mechanics used to hoist and control the sails, this includes halyards, sheets, guys, lifts, downhauls and outhauls together with their various shackles, blocks, cleats and winches. It is essential that they are inspected regularly for any signs of wear or stress. Information on types of cordage, wire ropes and fittings can be gained from a good chandler.

## *Sails*

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All yachts are supplied with Lucas sails which are manufactured from woven dacron. This material has good tensile strength, resists abrasion and is not unduly affected by moisture, however, it can be damaged by ultra-violet light and should not therefore be exposed unnecessarily to sunlight. If treated with care and maintained correctly these sails should give many seasons good service.

Yacht	I (M)	J (M)	P (M)	E (M)
Moody 31	11.73	3.81	10.21	3.51
Moody 336	12.88	4.11	10.97	3.73
Moody 35	12.88	4.09	10.90	3.78
Moody 376	14.33	4.57	12.60	4.34
Moody 425	15.77	5.03	13.95	4.72
Eclipse 33	12.19	3.10	10.51	3.50
Eclipse 38	14.33	4.57	12.50	4.34
Eclipse 43	16.00	5.03	14.02	4.72

---

## *Folding Sails*

---

### *Mainsail*

If your yacht does not have a self-furling mainsail system, one of the easiest methods of folding is with the sail still on the boom:

- 1 Tighten topping lift to support boom.
- 2 Lower the sail fully.
- 3 Ensure the coachroof hatches are closed.
- 4 Ease the tension in the foot of the sail by releasing the clew outhaul.
- 5 Remove the battens to minimise stretch and chafing in the batten pockets.
- 6 Stand close to the mast on the opposite side of the pile of mainsail.
- 7 With an assistant at the leech, take hold of the sail about eighteen inches from the boom, pull up together and lay the sail halfway over the boom. The bottom of the hanging fold should be just below the bottom of the boom.
- 8 Take a further foot of sail and fold back over the boom in the opposite direction.
- 9 Continue this layering action until the entire sail is laid over the boom.
- 10 Secure the sail to the boom using sail ties.
- 11 The halyard can either be removed and stowed or left attached to the head of the sail. If left on the sail, secure to the boom by passing a sail tie through the head of the sail and then tension the halyard.
- 12 If the sail is to remain folded for more than a few hours, put the sail cover on to prevent damage.

---

## Headsails

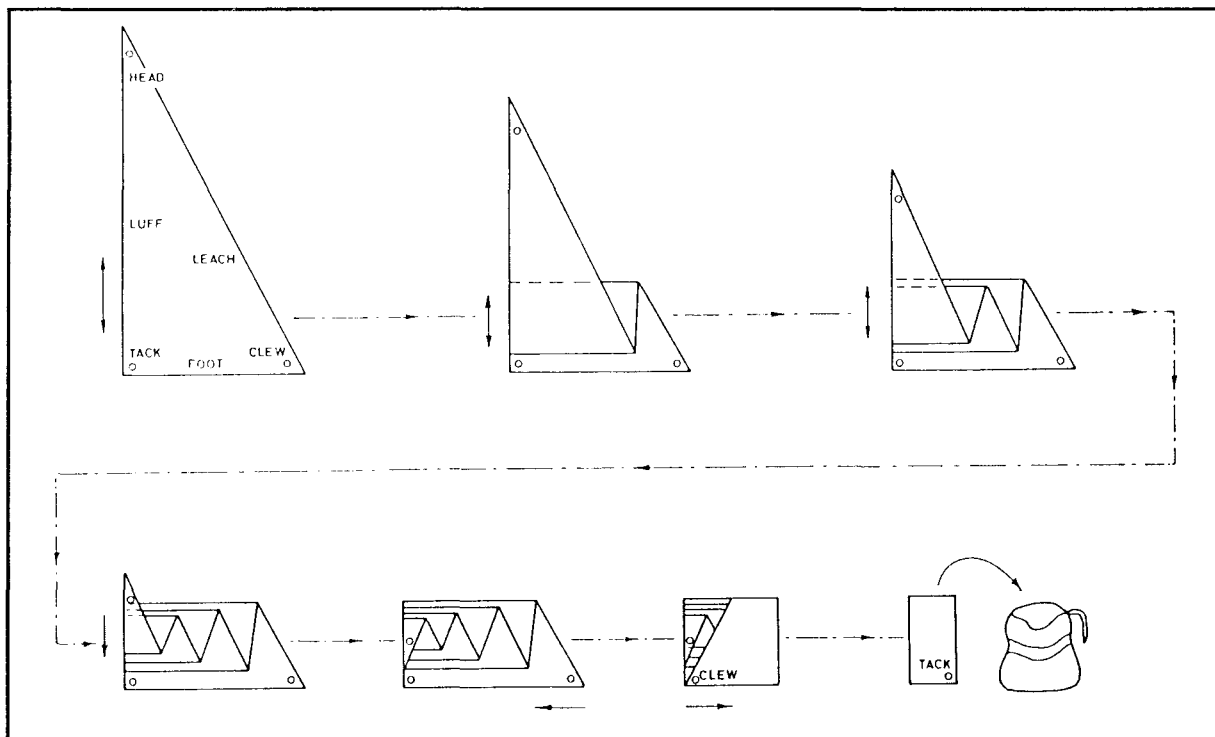
Some yachts are fitted with furling headsails but if not, the headsail must be removed and bagged when not in use.

### Bagging

- 1 Put the head of the sail into the sailbag.
- 2 Work the luff, leech and body of the sail in together.
- 3 Leave the tack and clew until last and pass the sailbag neck cord through both tack and clew before drawing tight. This enables the tack to be connected to the stemhead and the sheets to be fitted to the clew before the sail is released from the sailbag. The sheets can then be run back and secured without being snatched by the sail. The sail can also be hanked to the forestay, one hank at a time, until only the head is left to be attached to the halyard. In adverse conditions sails bagged in this way can save a great deal of time on the foredeck.

### Folding

- 1 Lay the headsail out flat in a convenient position, a pontoon or jetty is ideal.
- 2 The sail should then be folded following the steps illustrated.



*Folding a headsail*

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## *Setting sails*

---

No yacht will sail well if the sails are badly set. The points which follow are therefore included to assist in setting sails correctly.

### *Hoisting*

Whilst this is a very straight forward procedure in itself, the amount of tension in the halyard depends on wind conditions. All modern sails respond well to differing tensions. Hoist the sail fully ensuring that on a mainsail there are no wrinkles in the luff and also that on a **headsail** the luff does not curve away from the forestay between the hanks. Creases in a sail are the first sign of incorrect tension and depending on their position on the sail, indicate whether there is too much or too little tension in the halyard.

### *Sheeting and trimming*

The basic rule of sail sheeting is "let it out till it flaps, pul it in till it stops."

Trimming and sheeting are best explained in books specifically written for the purpose. It is recommended that every yacht's library has one.

### *Kicker*

This controls the amount of twist in the mainsail and also ensures that the boom does not 'kick up'. Therefore, there must always be some tension in the kicking strap, the only exception being when the mainsail is sheeted in hard. The easiest way to tension the kicking strap to the optimum position is by using the top batten as a guide. This should be parallel to the boom. If it lies to leeward, tighten the kicking strap and if it lies to windward loosen it.

## *Mainsail reefing*

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All current production yachts are fitted with either slab reefing or in-mast furling systems.



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## *Maintenance*

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### *Rigging checks*

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During the sailing season when your yacht is in commission, regular maintenance checks should be carried out and particularly before a long voyage.

- 1 Examine all steel/wire ropes for corrosion, wear and damage.
- 2 Examine all terminations for signs of wear, cracks or damage. Pay particular attention to all split pins, they should be the largest size possible to pass through the cotter pinhole with at least 3/4" protruding through the hole.
- 3 Examine all bottle screws for signs of wear or damage and ensure they are 'in safety', i.e. the inner threads are visible through both safety holes. Where bottle screws are covered with tape or plastic tubing, remove to enable examination.
- 4 Ensure the ends of the spreader bar are protected to prevent sail chafing. Ensure the rig is correctly adjusted.
- 5 Remove halyards from the mast leaving messenger lines for rereefing.
- 6 Check all running rigging for signs of wear, paying particular attention to all eye splices and end terminations. On the wire/rope halyards check the wire rope splice. If the rope side of the splice is starting to swell then the wire has started to rust and the halyard should be replaced. Wash halyards which are not being replaced and soak rope joins in linseed oil (also soak joins on new halyards).
- 7 Check over the standing rigging paying particular attention to the wire where it enters the swage fittings. Should there be any sign at all of cracking in any one of the wire strands then replace the shroud concerned.
- 8 Look for signs of wear of ridging on clevis pins where they may rock or work in chain plates or shroud tangs, also look for corresponding wear on mating fittings.
- 9 Where shrouds locate into mast by means of a shroud terminal in a slot, ensure that there is no undue wear.
- 10 Renew all split pins for recommissioning.

---

## *Mast*

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See autumn overhaul in Kemps 'Hints and advice on rigging and tuning your Kemp mast' booklet.

## *Roller furling*

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Roller furling gear must be lubricated and cleaned regularly in accordance with the manufacturers recommendations..

## *Sails*

---

Sails should be checked regularly and repairs effected for the following:

- 1 Chaffing occurring mainly at spreaders and on foot of large sails.
- 2 Tears at batten pockets and at all attachment points, tack, clew, head, sail and reefing cringles.
- 3 Any other damage.
- 4 When a sail is lowered it should be bagged and stowed below as soon as possible.
- 5 On return to harbour, release the tension on the clew outhaul of the main, remove battens, flake the sail over the boom, secure with ties and put on sail cover.
- 6 Furling headsails and mainsails should be checked carefully for any signs of wear on the stitched seams.

## *Ropes*

---

All ropes should be checked regularly during the season for the following:

- 1 Signs of wear or damage where constantly cleated, clamped or passed round sheave blocks or through fairleads.
- 2 Damage to whipping or heat shrink sleeves.
- 3 All splices are serviceable. It is important where polyester ropes are spliced to steel wire ropes, such as halyards.

---

# *Steering systems*

## *Single station steering systems*

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All steering systems fitted are manufactured by Whitlock Marine

Yacht	Model	Wheel Size
*Moody 31	Cobra 5R Delux	26"
Moody 336	Cobra 5R Delux	30"
Moody 35	Constellation 400	36"
Moody 376	Constellation 400	36"
Moody 425	Constellation 400	36"

\* Tiller steering is standard on Moody 31, wheel steering fitted only as an option.

## *Emergency tiller*

---

All yachts, less those fitted with two steering positions as standard, are supplied with an emergency tiller. This is fitted in a tiller socket located either within the yacht or externally under a blanking cover.

## *Cobra systems*

---

The system is complete with friction brake and integral stainless steel output lever.

The system consists of:

Universal tiller lever, bored and keyed to suit the rudder stock.

Stainless steel draglink complete with rose joints and rudder stop ring, fitted beneath the pedestal.

Either Retrofit guard rail or a single lever engine control and guard rail (see illustrations on pages 3.5 and 3.6.

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## *Constellation Systems*

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The **Whitlock** Constellation 400 system, comprises a pedestal complete with friction brake and conduit plate assembly.

The system consists of:

Engine control and guard rail.

2-turn tangential Unit.

12" or 15" quadrant in either aluminium or bronze, bored and keyed to suit rudder stock.

2 or 3 conduits with fittings and 6 mm or 8 mm stainless steel wire.

On some yachts, a 6" double conduit to sheave adaptor.

2 or 3 turn, 5/8" pitch, stainless steel chain assembly (see illustration on page 3.7).

## *Dual station steering systems*

---

Yacht	Model	Wheel Size (Cockpit)	Wheel Size (Inside)
Eclipse 33	Cobra 5R Delux	36"	18"
Eclipse 38	Cobra 5R Delux	40"	20"
Eclipse 43	Cobra 5R ISS Prestige	40"	20"

## *Inside Steering Station*

---

Where used, the inside steering is a 2-turn bulkhead unit with integral 2:1 multiplier which results in 4 turns of the wheel lock to lock. The system consists of:

2 conduits with fittings and 5mm stainless steel wire.

12" quadrant, bored and keyed to suit rudder stock.

2-turn tangential unit.

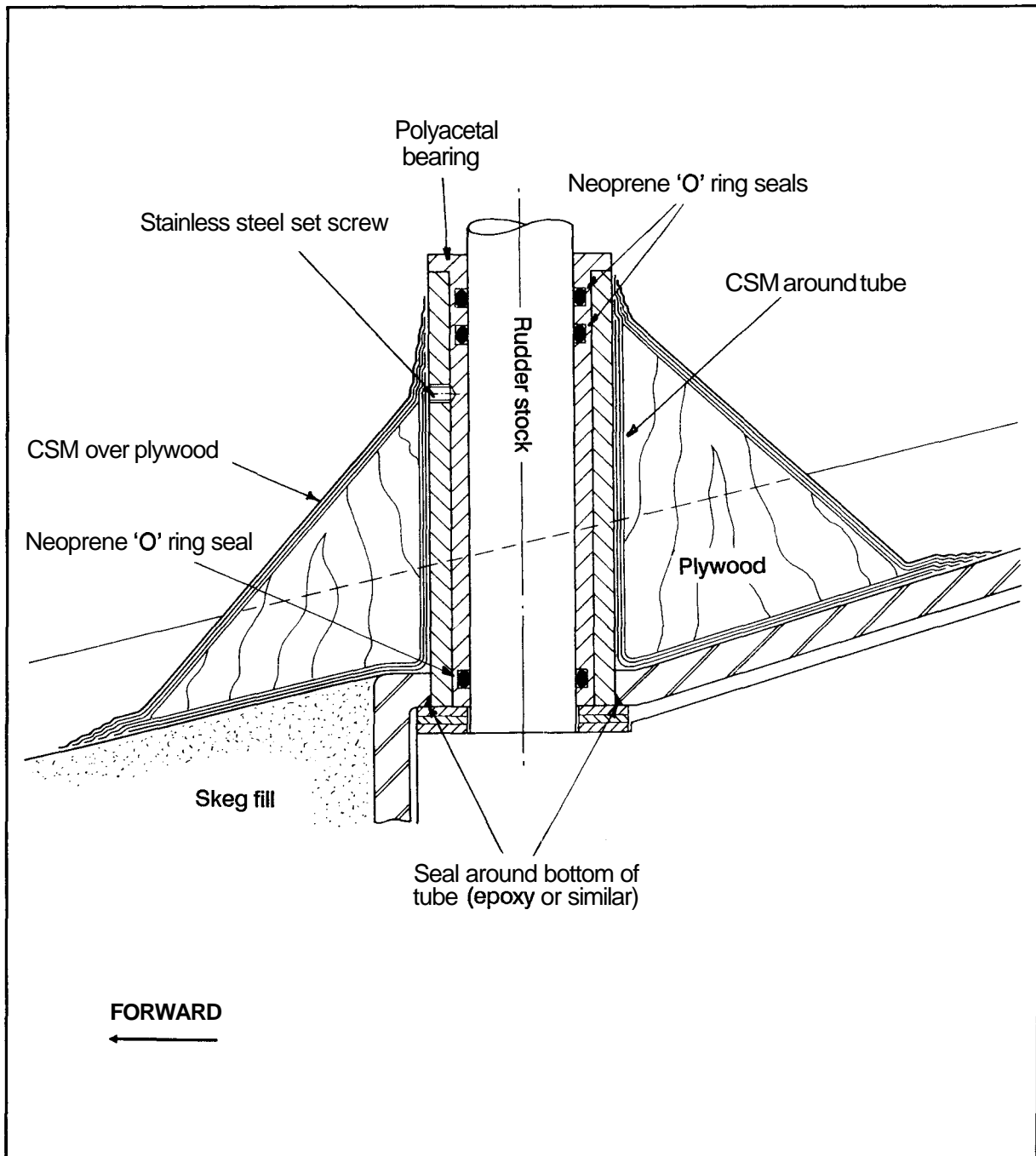
Clutched helm, it is recommended for reasons of safety that the inner helm be disengaged using the clutch when the cockpit steering station is in use.

---

## *Rudders*

---

All yachts are fitted with a partial skeg hung, semi-balanced rudder. It consists of a long stainless steel stock passing through the hull. A stainless steel stiffening plate is welded to the stock and a *GRP* rudder is moulded over the stock and plate. For wheel operation, a steering quadrant is fitted to the stock within the hull area. All craft use 'O' rings in polyacetal tubes which are fitted inside *GRP* tubes.



*Rudder Tube Assembly*

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## *Maintenance*

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### *Rudders*

---

Rudders become less efficient as bush wear increases. Bushes should therefore be checked at the end of each season and repaired as necessary. Rudders may leak slightly as the 'O' rings become worn. These should be checked at the end of each season and replaced as necessary.

### *Wheel Steering Systems*

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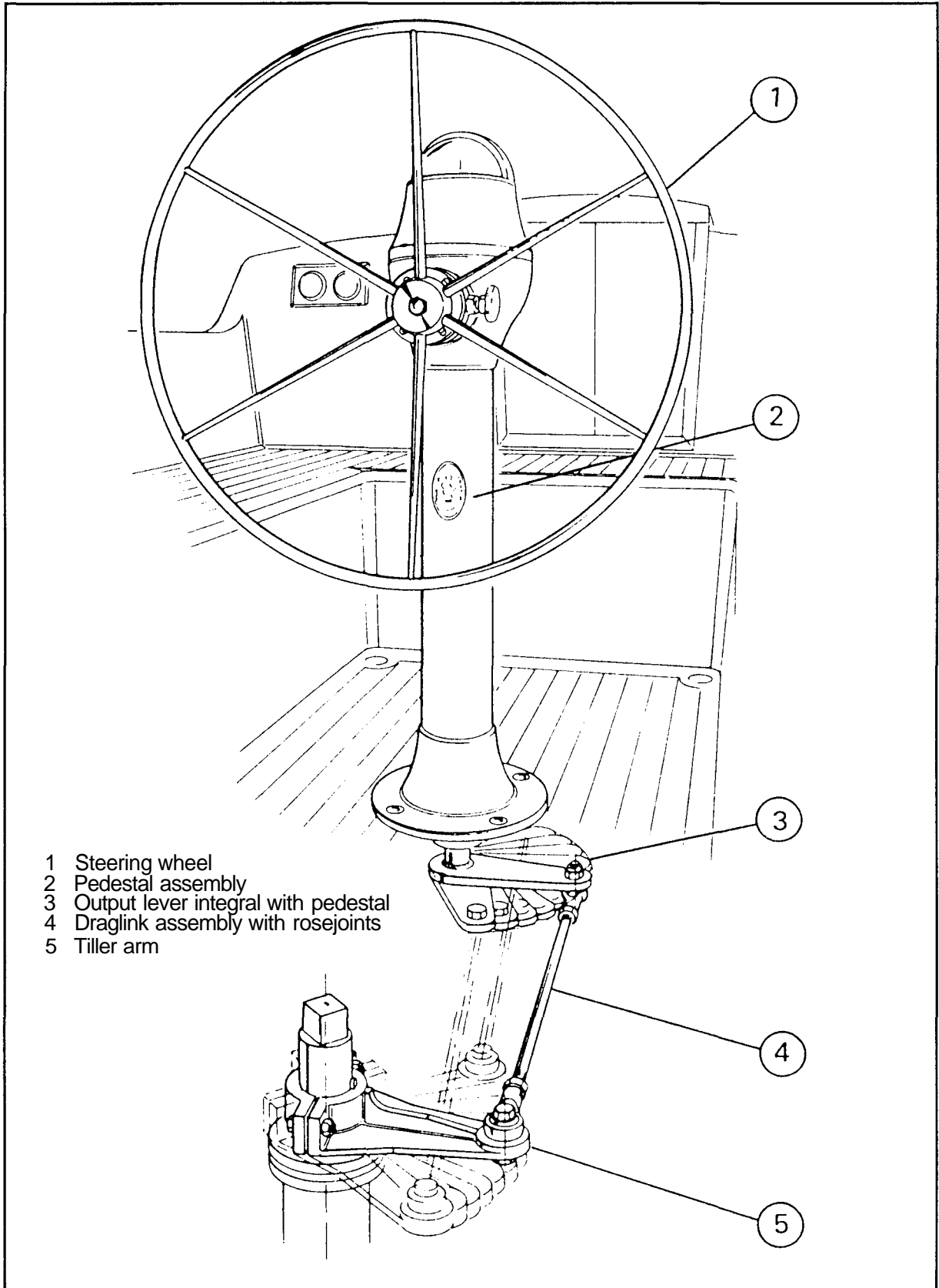
Whitlock Cobra and Constellation steering systems are extremely robust, reliable and relatively maintenance free. In order for the system to maintain its performance, the following is recommended.

- 1 Periodically wash the paint finish of the pedestal with fresh water. Wax with conventional car polish.
- 2 Check that water is not gaining entry to the inside of the pedestal assembly. A drain hole is provided in the lower housing to allow for draining of any condensation. If large quantities of water are evident it will be necessary to remove the top cover and reseal using a proprietary sealant. Take care to remove all old sealant from the pedestal head and top cover before attempting to apply new sealant. If a compass is fitted check that it is also properly sealed.
- 3 At least twice a season regrease the lower bearing via the grease nipple. Valvolene XL and Vickers Neox greases are recommended.
- 4 Inspect Cobra systems for security of tiller arm and draglink annually. Ensure draglink joints rotate freely.

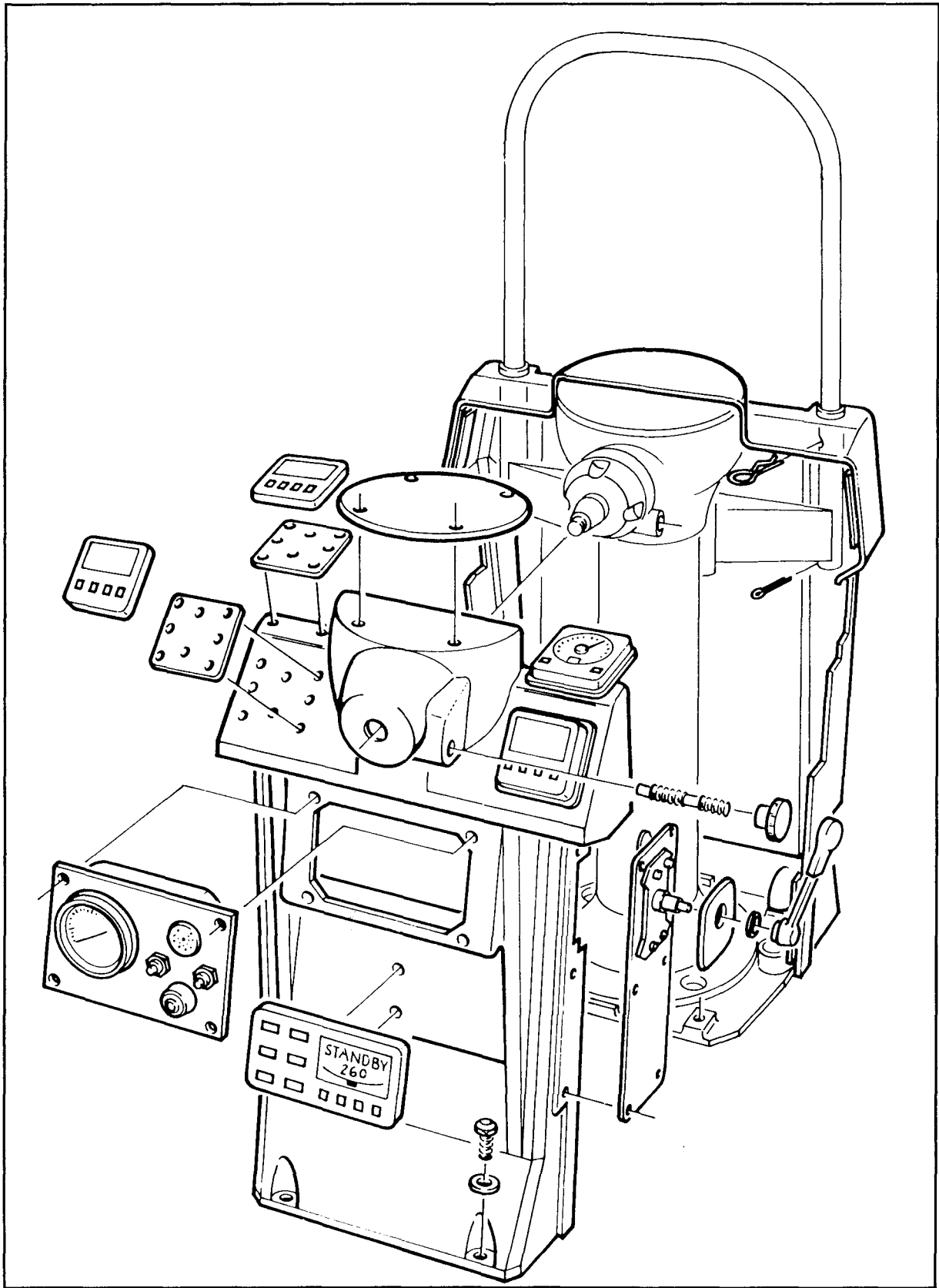
### *Constellation systems only*

- 1 Inspect conduits and wire assemblies for wear and damage annually.
- 2 Periodically check the tension in the wires. To adjust, proceed as follows: Slacken the lock nut and retaining nut. Pull the cable tight by hand and tighten the retaining nut as far as possible by hand. Tighten the lock nut to 30ft/lbs using a torque wrench. Check steering for backlash. **DO NOT OVERTIGHTEN** as this will cause excessive wear on the cables, heavy steering and loss of 'feel'.
- 3 At least twice a season and before a major voyage, check the security of quadrant mounting bolts. Lubricate eyebolts and sheave bush with Silicone based grease.

The stainless steel wire used has a finite life. It is recommended that it is renewed after every fifth season.

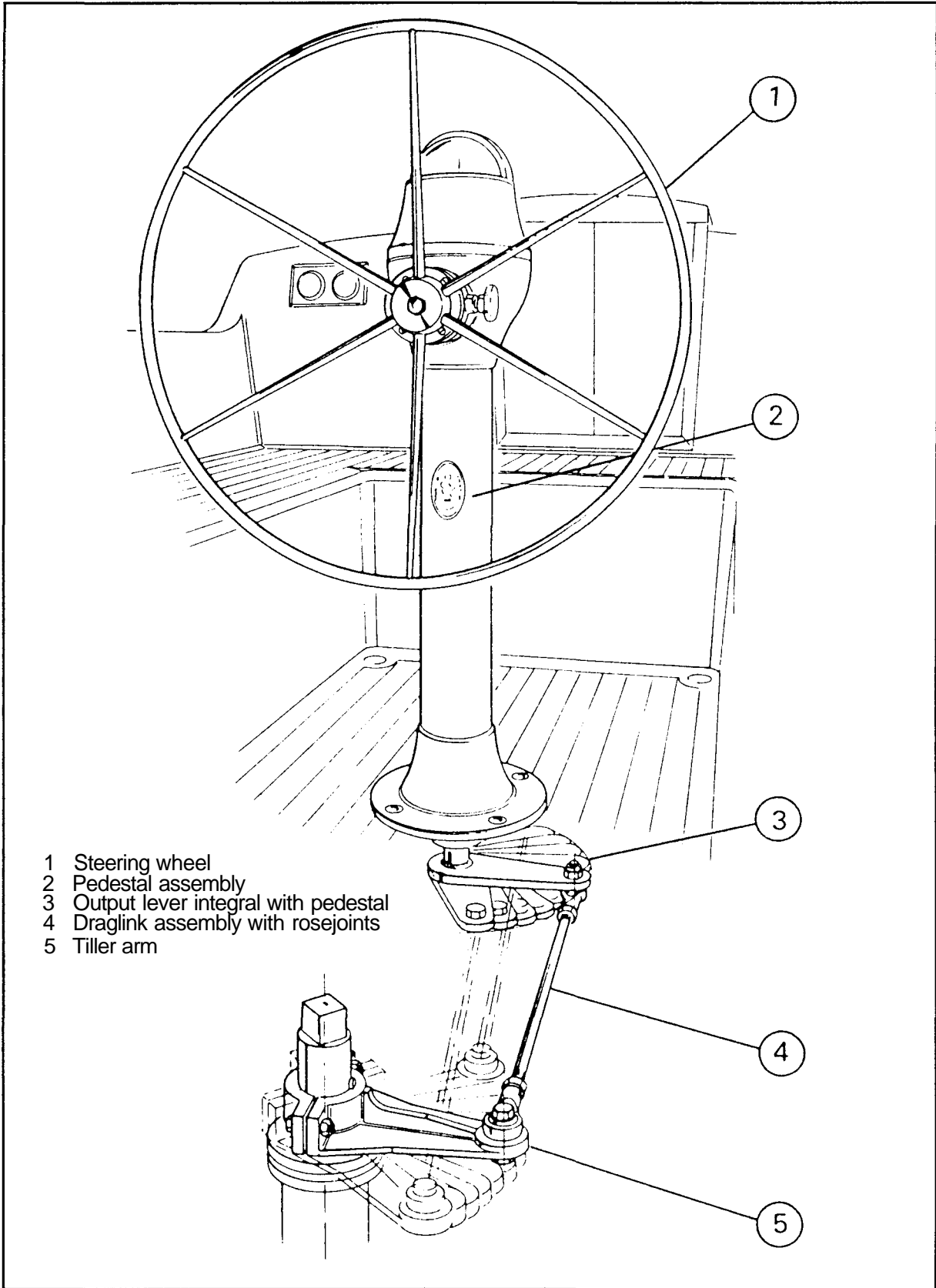


*Cobra 5R Delux Steering System*

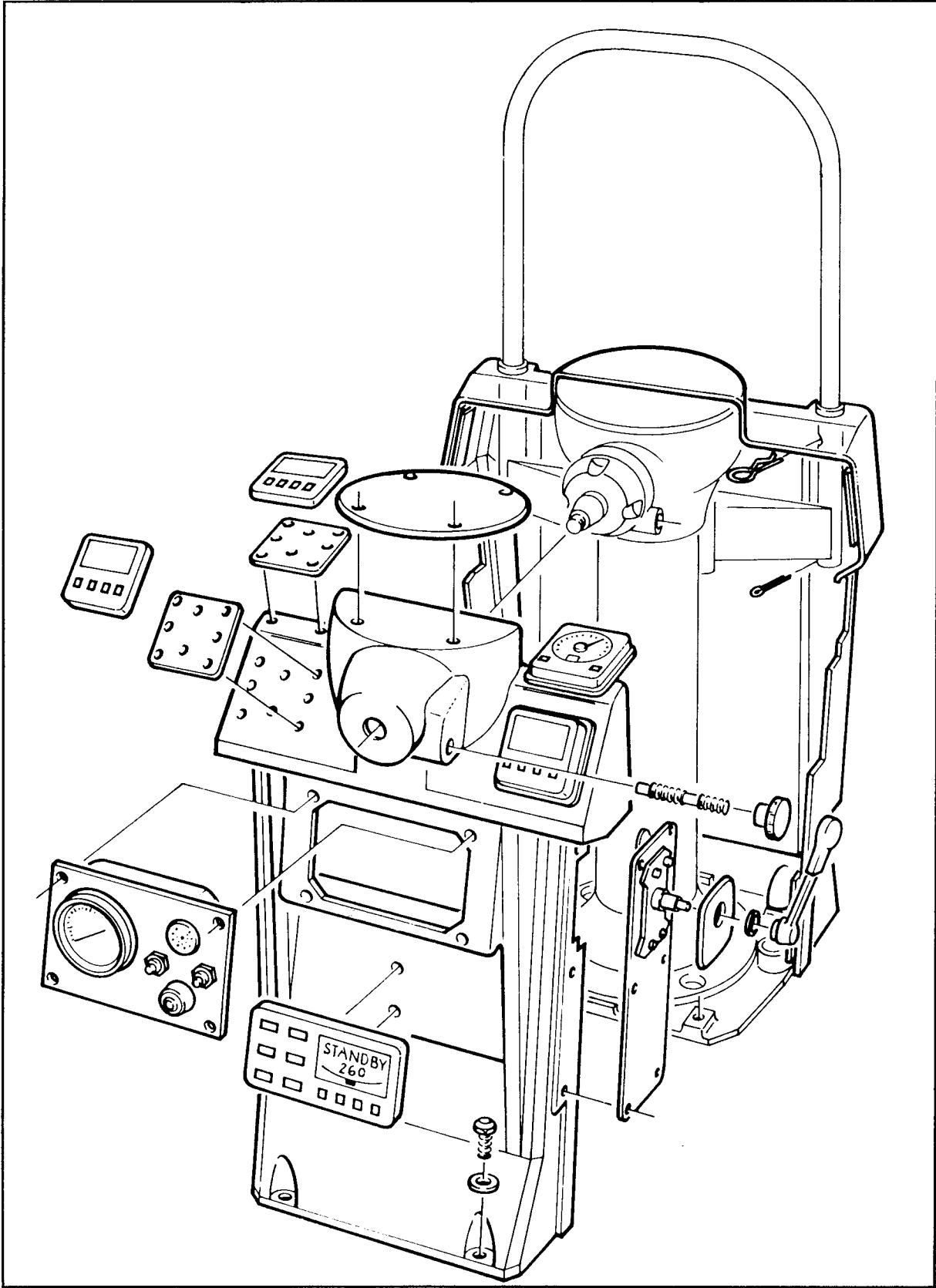


*Cobra 5R ISS Prestige Steering System*

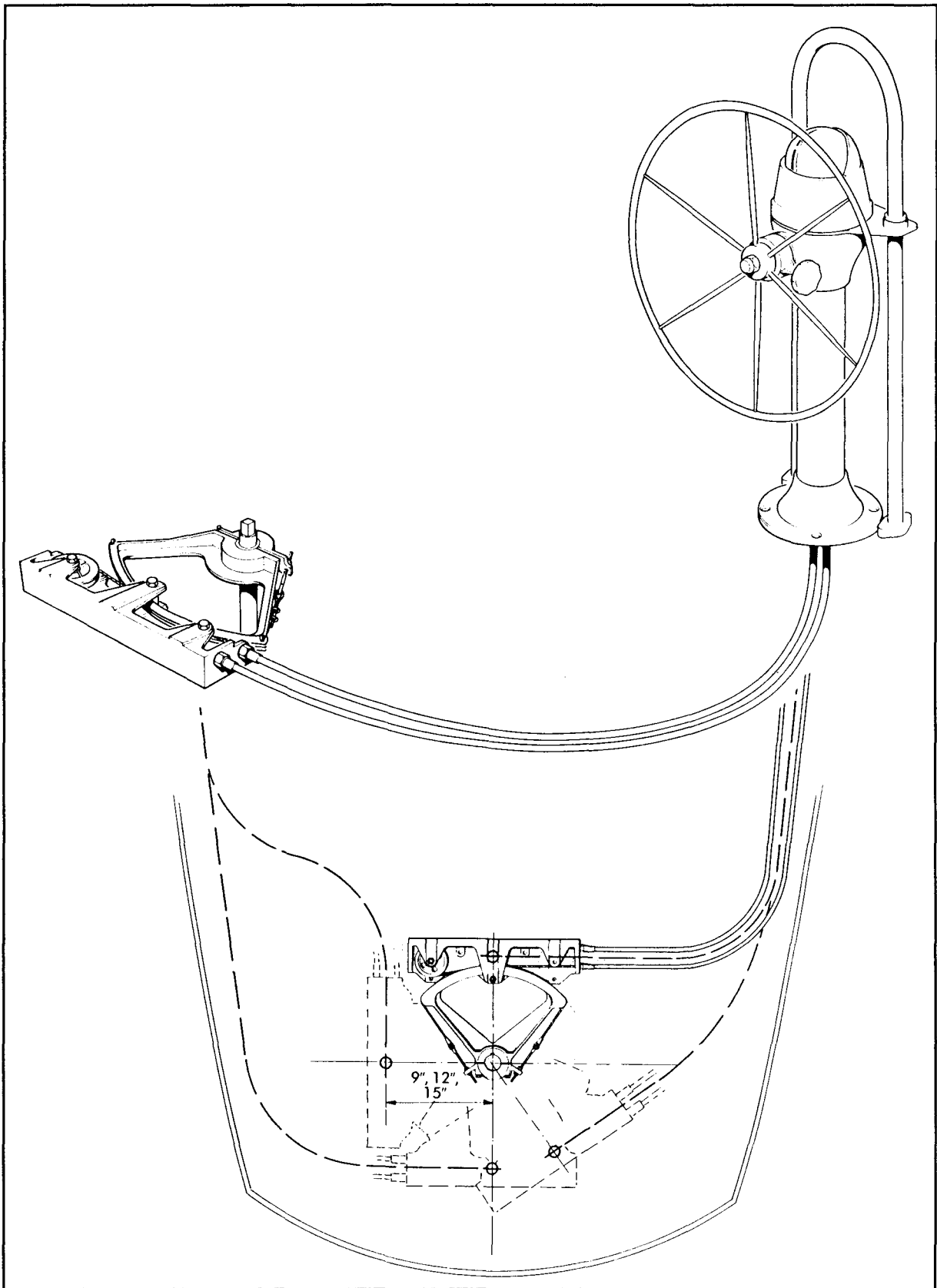




*Cobra 5R Delux Steering System*



*Cobra 5R ISS Prestige Steering System*



*Constellation 400 Steering System*

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# *Engine systems*

## *Engine Options*

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The Engines fitted to the current production yachts are all four stroke engines:

Yacht	Standard Engine	GearBox	Tank Capacity Litres	Prop Sizes
Moody 31	Volvo 2003 <b>28hp</b>	Volvo MS2	91	16x14x2LH <b>Aquasail</b>
Moody 336	Volvo 2003 <b>28hp</b>	Volvo MS2	202	15x14.5x2RH fixed Clements
Moody 35	<b>Thornycroft T80 35hp</b>	<b>Hurth HWB100</b>	186	16x11x2 Aquasail
Moody 376	<b>Thornycroft T80 35hp</b>	<b>Hurth HWB100</b>	204	16x11x2RH Aquasail
Moody 425	Thornycroft T110 55hp	Hurth HWB100	273	17x11x2RHfixed Aquasail or 17x10x3RH fixed aquapoise
Eclipse 33	Volvo 2003 <b>28hp</b>	Volvo MS2	182	<b>18x11x2LHAquasail</b> or <b>17x12x2LHAquasail</b>
Eclipse 38	<b>Perkins Prima M60</b>	Hurth HWB250	273	<b>17x11x3RHClements</b>
Eclipse 43	<b>Perkins Prima M80T 78hp</b>	Hurth HWB250	409	<b>18x13x3RHAquasail</b>

! *It is possible to fit **turbocharged** systems if required.*

! *Each yacht has an engine maintenance manual supplied by the manufacturer.*

---

## ***Running -In***

---

It is recommended to run-in new engines (20 hours) following these basic points:

- 1 Do not excessively rev engine.
- 2 In the event of a warning light or alarm, stop the engine immediately.
- 3 All gear changes should be implemented at low engine revolution (i.e. from neutral).
- 4 Place gear selection control in reverse position or for fixed bladed props, to reduce drag, prop can be left in neutral whilst under sail. Never put the gear lever in the position corresponding to the yacht's direction of travel.
- 5 Run the engine occasionally during long voyages to keep batteries charged.
- 6 Do not switch off the ignition and battery switch until engine has fully stopped.
- 7 Ensure that servicing is carried out by an official service agent.
- 8 Check engine anode (see cathodic protection).

The cooling system is filled with liquid and should be drained when there is risk of frost and during **winterisation**. In certain cases a suction action may occur when the sea water system is being drained. Close all drainage points when the boat is not under constant supervision. Incorrect drainage can cause the yacht to fill with water and sink.

Your engine has been installed in precise alignment with the shaft. However, with flexibly mounted engines it is possible for misalignment to occur, it is good practise to have it checked when the engine is being serviced.

Care should be taken not to soil the rubber mounts with diesel or lubricants as this will cause deterioration of the rubber.

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## ***Fuel systems***

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### ***Fuel tank***

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The fuel tanks for all yachts are constructed from heavy gauge mild steel, externally treated with a corrosion resistant paint finish. Where tanks are exposed to damage by stowed equipment, a regular check should be made to ensure there is no damage to the external finish causing rust spots to develop. To prevent condensation forming inside the tank, keep the fuel tank full whenever possible.

### ***Fuel stopcock***

---

All yachts have a stopcock fitted in the fuel feed line. Unless the fuel system is undergoing repairs or maintenance, it is normal to leave the stopcock on. If the engine is run with the stopcock turned off, an airlock may occur which will make it necessary to bleed the system.

### ***Fuel filter***

---

A fuel filter is mounted on a bulkhead within the engine compartment.

### ***Water trap***

---

A diesel water trap is mounted on a bulkhead within the engine compartment. The bowl should be checked periodically for water content and drained as necessary.

### ***Return pipes***

---

All diesel engine installations in Moody yachts are fitted with fuel return pipes to allow surplus fuel to be returned to the tank.

### ***Fuel contents***

---

Fuel tank contents are determined by either sightglass or fuel gauge.

---

## *Cooling systems*

---

The basic cooling system is illustrated below. Seawater is drawn into the system by the engine impeller, entering the yacht through a skin fitting. It passes through a seacock and a filter before passing through the engine and the mixer box and out through the exhaust system. Its passage through the engine depends on the type of cooling system.

### *Raw water cooled engines*

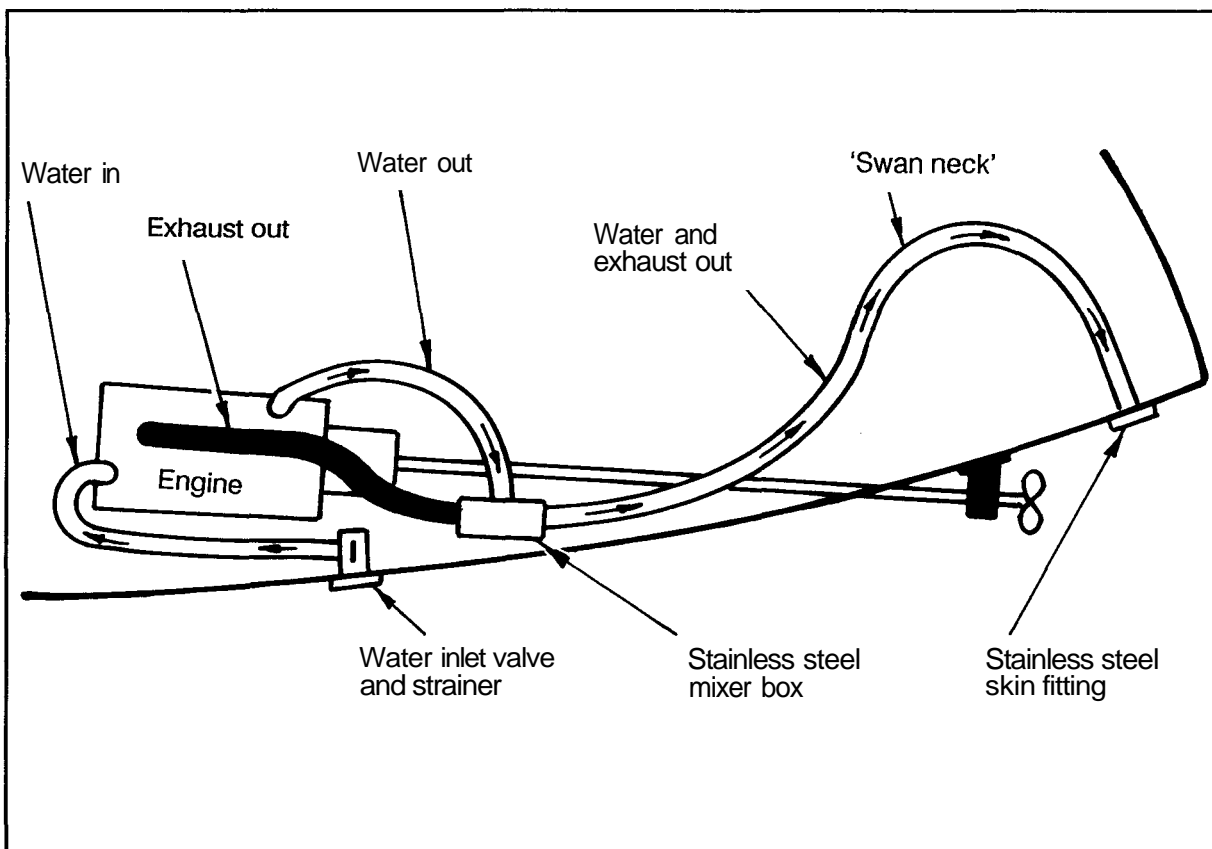
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In this type of engine the raw seawater circulates through galleries in the engine and gearbox before being injected into the exhaust pipe for discharge.

### *Heat exchanger cooled engines*

---

This type of system uses fresh water which circulates through the engine and a heat exchanger in a closed circuit. Raw seawater passes through the heat exchanger where the heat is transferred from the closed circuit freshwater system. The heated seawater is then injected into the exhaust system for discharge. This type of engine runs at a slightly higher temperature than the raw water type.



*Basic Engine Cooling and Exhaust System*

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### ***Water filter***

---

This is a very basic strainer forming part of the water inlet seacock (see illustration on page 1.2). Inspection and cleaning should be carried out as follows:

- 1 Ensure the seacock is in the closed position.
- 2 Unscrew the wing nuts and swing the cap aside.
- 3 Withdraw the plastic filter and **inspect/clean**.
- 4 Reassemble, ensuring the cap is clamped tightly to prevent leakage.

If air is drawn into the system through this filter, the engine may overheat causing damage.

- 5 Turn on the seacock and check for leaks.

### ***Exhaust systems***

---

The injection of the exhaust gasses into the cooling water in the mixer box reduces the temperature of the exhaust gasses allowing them to be discharged through reinforced rubber tubing and a stainless steel **skin** fitting. The exhaust tube has a 'swan neck' to reduce the possibility of seawater being forced into the exhaust and into the cylinders, causing damage to the engine. This problem can further be avoided if the following action is taken:

After three or four attempts to start a stubborn engine, turn off the water inlet seacock until the engine starts.

When starting the engine check that water is being ejected through the exhaust within 20 seconds. If not, switch off and investigate. First check that the water inlet seacock is open.



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## *Engine controls*

---

All yachts are fitted with the a single lever 'TX' type throttle and gear change lever.

**N**=Neutral  
**F**=Forward Gear  
**R**=Reverse Gear  
**T**=Throttle Increase

### *Gear selection*

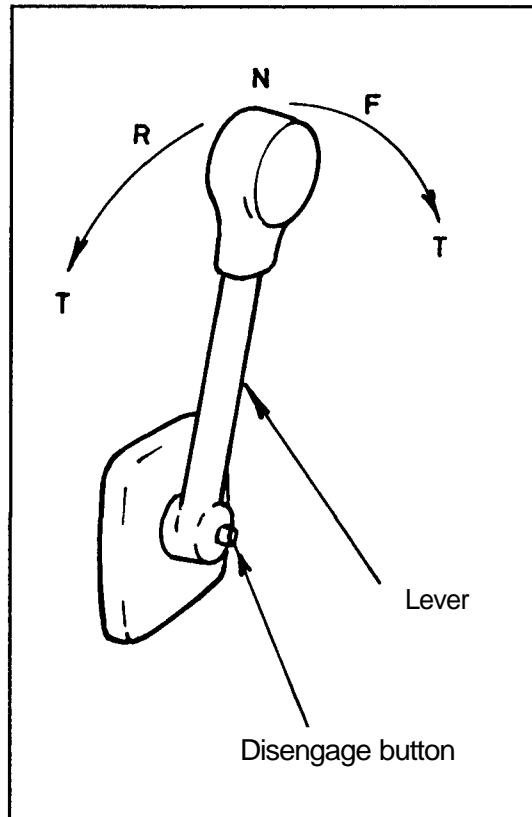
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Forward is selected by pushing the lever forward, the further forward it is pushing the higher the engine revs.

Reverse is selected by pulling lever aft and again, the further aft it is pulled, the higher the engine revs.

To increase engine revs without selecting a gear, press and hold the gear disengage button (1) then move lever to forward/reverse. Disengage button (1) will pop out when passing lever through neutral.

**!** *Warning: Gear selection will re-engage when lever is returned to neutral*



*TX Lever*

### *Engine stop mechanisms*

---

Diesel engines are stopped by preventing the fuel being injected into the cylinders. This is achieved using a cable operated control marked 'STOP' To stop, pull and hold the control knob until the engine has stopped. When the engine has stopped, push the control knob back to the 'RUN' position. Then switch off the engine ignition.

This control also operates a cold start, by pulling out once before trying to start engine.

**!** *If it is not pushed all the way in, the engine will not start.*

**!** *On engines fitted with mechanical stop systems, do not turn the key to the 'off' position whilst the engine is running. This can seriously damage the charging system, particularly the alternator.*

---

**!** *If your engine fails to start, when the batteries are in good condition, check first that the engine 'stop' control is in the 'run' position.*

On engines fitted with mechanical stop systems, do not turn the key to the 'off' position whilst the engine is running. This can seriously damage the charging system, particularly the alternator.

If your engine fails to start, when the batteries are in good condition, check first that the engine 'STOP' control is in the 'Run' position.

### ***Eclipse 38 and 43 engine stop mechanisms***

For yachts fitted with thornycroft engines:

- 1 Ensure gear lever is in neutral and engine revs are idling.
- 2 Press and hold the engine STOP button until audible alarm sounds.
- 3 Turn ignition switch (key) to the OFF position.

### ***Turbocharged engines (optional)***

---

The turbocharger is used primarily to attain higher power output with better fuel economy. Turbocharging is a form of supercharging which uses exhaust gases to drive a compressor to force more air into the **cylinders**. This means that more fuel can be injected into the cylinders and thus produce more power.

### ***Operating instructions (turbocharged engines)***

---

The same operating procedure applies as for the basic engine but attention should be paid to the following points:

- 1 Do not run at idling speed for too long. The temperature in the combustion chamber becomes too low for effective combustion and the engine produces very unpleasant black exhaust fumes.
- 2 Do not attempt to charge batteries at idling speed as most generators and alternators only charge above 1500 rpm.
- 3 Volvo 2003T engines should be run at 2,500 rpm or more for 25% of the engine running time to avoid low temperature glazing of the cylinder bores.

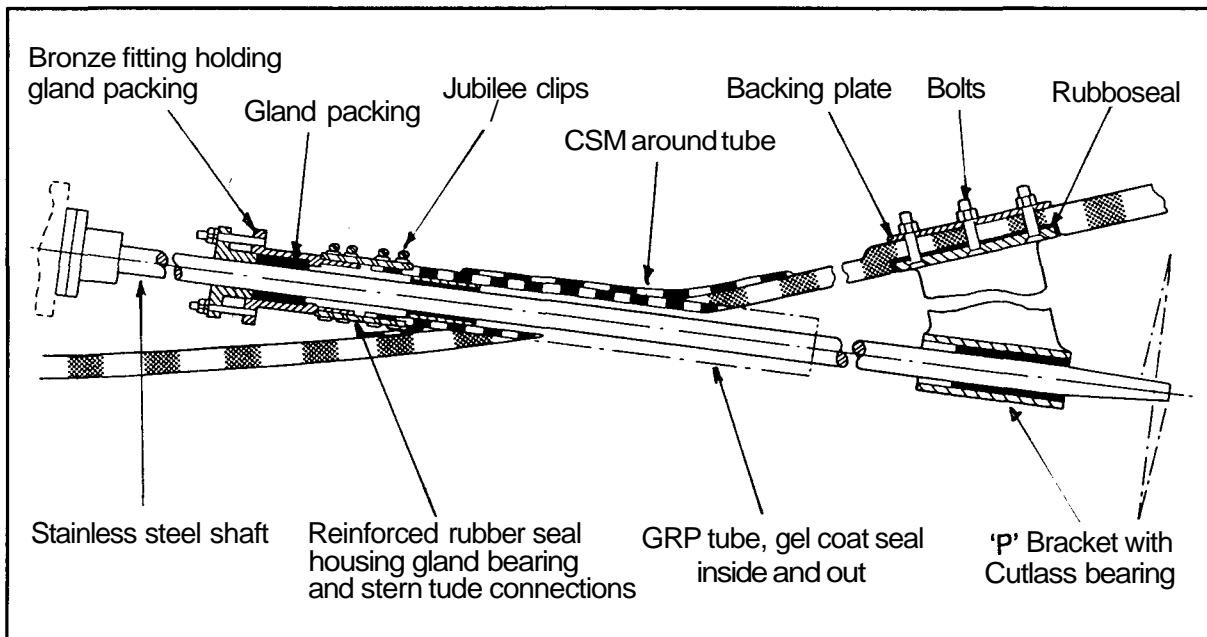
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- 4 If the engine has been run hard for a long period, let it idle for a few minutes before switching off. This is sometimes known as 'Turbo Run Down'. In all engines, it will avoid the risk of 'AfterBoil', a condition where the cooling system temperature continues to rise because of lack of circulation. Overheating can cause excessive bearing wear in the **turbocharger**.

---

## *Stern gear*

---

All yachts are fitted with a 'P' bracket type stern bearing. The strut is either pinned through iroko hardwood blocks secured to the hull and glassed over, or bolted to a reinforced area to the hull. One securing bolt is electrically bonded to the sacrificial anode for cathodic protection. A water lubricated 'Cutlass' bearing supports the stainless steel propeller shaft. The propeller shaft passes through a GRP stern tube which is bonded to the hull. The tube is offset to enable the shaft to be withdrawn without obstruction from the rudder.



*Typical stern gear installation*

---

## *Cutlass bearing*

---

All yachts use either 1" or 1 1/4" cutlass bearings in the 'P' bracket.

This type of water lubricated bearing is normally manufactured from neoprene or polyurethane and has a long life in clean water. High silt, sand and mud levels will cause accelerated wear.

---

### *Calcium deposits*

---

Where yachts remain unused for long periods it is possible for a hard calcium deposit to form on the propeller shaft. If this deposit forms between the joins in the cutlass bearing, when the shaft revolves for the first time the hard calcium deposit can cause damage to the bearing surface. This is normally associated with noise and vibration from the bearing area. If this happens stop the engine immediately and investigate. The deposit can be removed with a sharp scraper. To gain access to the bearing area, uncouple the propeller shaft at the engine and slide it back until the affected area is exposed.

### *Stern glands*

---

The stern glands on all yachts have PTFE packing. This type of gland is water lubricated, but the locking nut should be given a partial turn daily prior to motoring to prevent the ingress of water.

### *Bow thrusters*

---

The Eclipse 43 and 38 have a three bladed propeller sited inside a transverse tube near the bow. The symmetrical design produces equal thrust whichever way it rotates and allows for precise manoeuvring.

*! It is advisable to keep operation of the bow thruster to a minimum as it uses a high level of battery power.*

---

## *Maintenance*

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### *Basic engine care*

---

The following basic points, if adhered to, will ensure long engine life. The most critical period in the life of a marine diesel engine is the first 20 - 30 running hours. If in any doubt, the engine manufacturer's manual should be referred to.

- 1 Do not start an engine unless you are sure:
  - Engine oil level is satisfactory.
  - Gearbox oil level is satisfactory.
  - Coolant level is satisfactory (Heat exchanger cooled engines only).
  - Throttle set correctly - OUT OF GEAR.
  - Fuel stopcock turned on.
  - Fuel is free from contamination.
  - Water inlet seacock is turned on.
- 2 Immediately after starting, check:
  - Oil pressure warning light extinguished.
  - Charging light extinguished (or ammeter reading satisfactory).
  - Water emission from exhaust.
- 3 Avoid high revs.
- 4 Allow engine revs to decrease to idle before changing gear.
- 5 Do not allow engine to run at a low idle for long periods (associated with the production of black noxious fumes).
- 6 During running, check any instrumentation, ie, water temperature gauge, oil pressure warning light, etc.
- 7 Prior to stopping engine allow to idle for a few minutes with the gear lever in neutral.
- 8 After stopping engine return 'STOP' control to the 'Run' position.

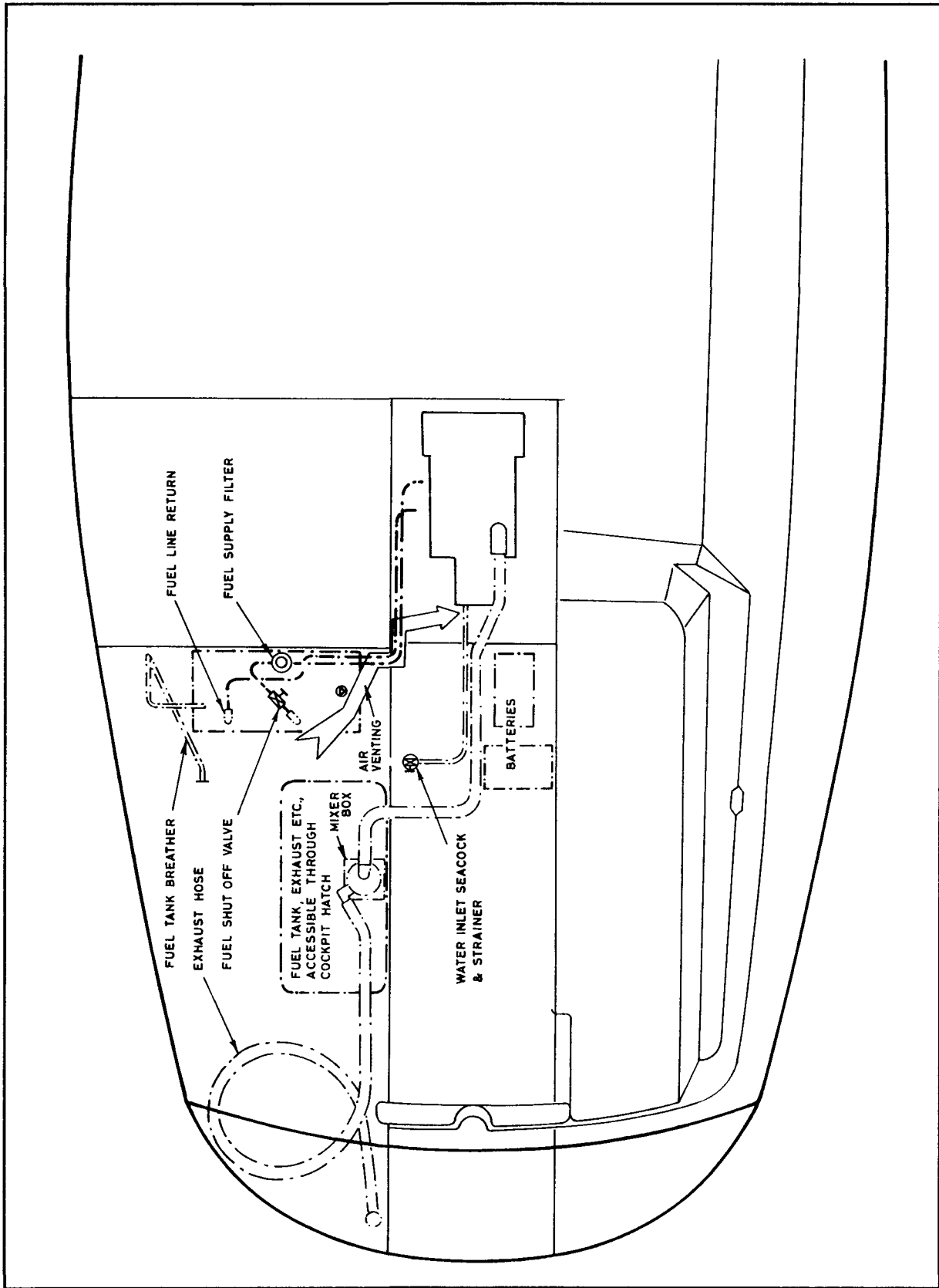
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- 9 Ensure the first service is carried out by a manufacturer recommended agent.
  - 10 Ensure all subsequent services are carried out at the correct frequency.
  - 11 Ensure ONLY the correct lubricants are used.
  - 12 Adhere to all manufacturer's recommendations.
  - 13 Keep an engine log.

### ***Turbochargers***

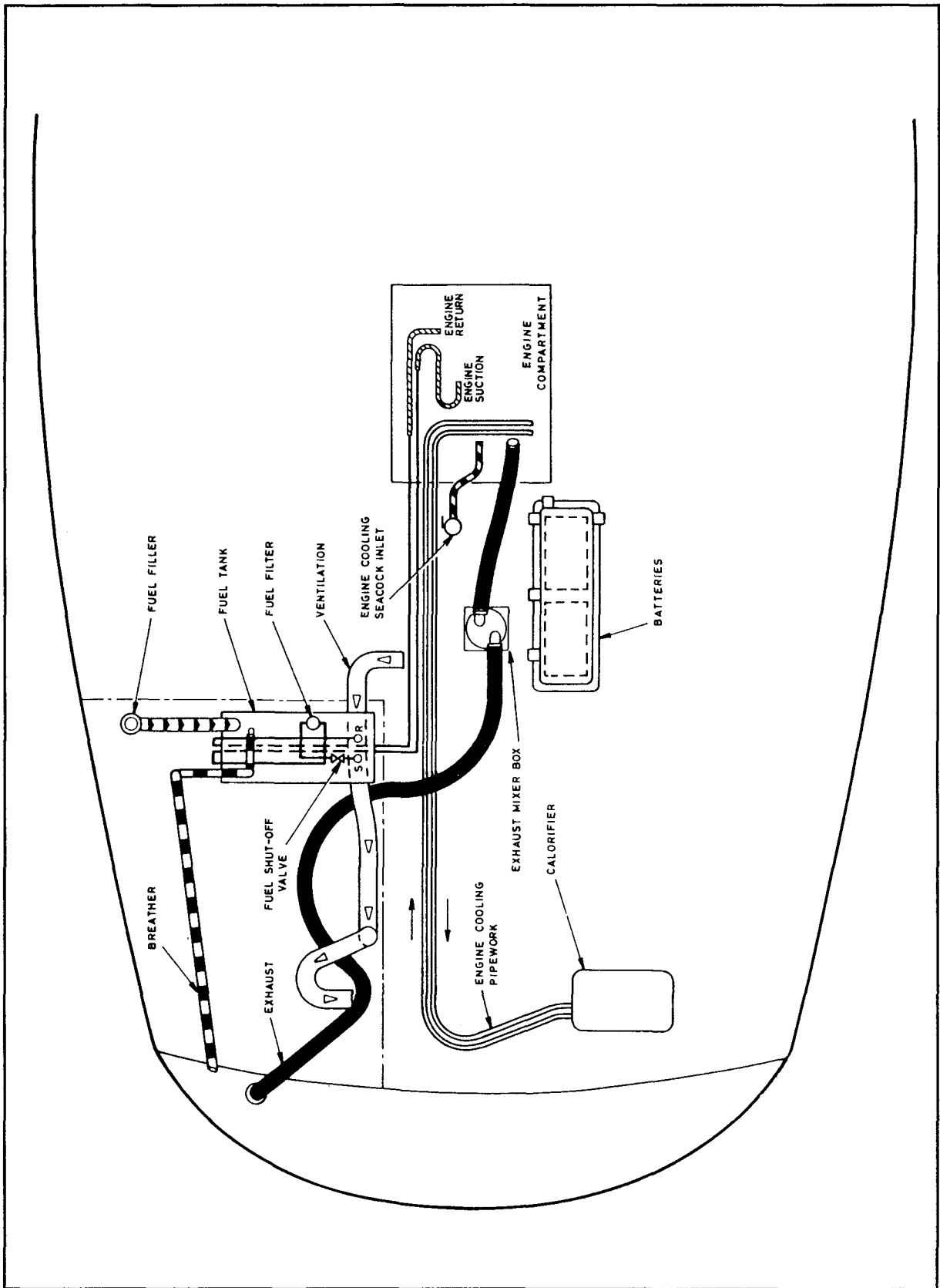
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Correct lubrication is critical for turbocharged engines using the correct grade at the recommended frequency.

For further information see section on **dewinterising**.

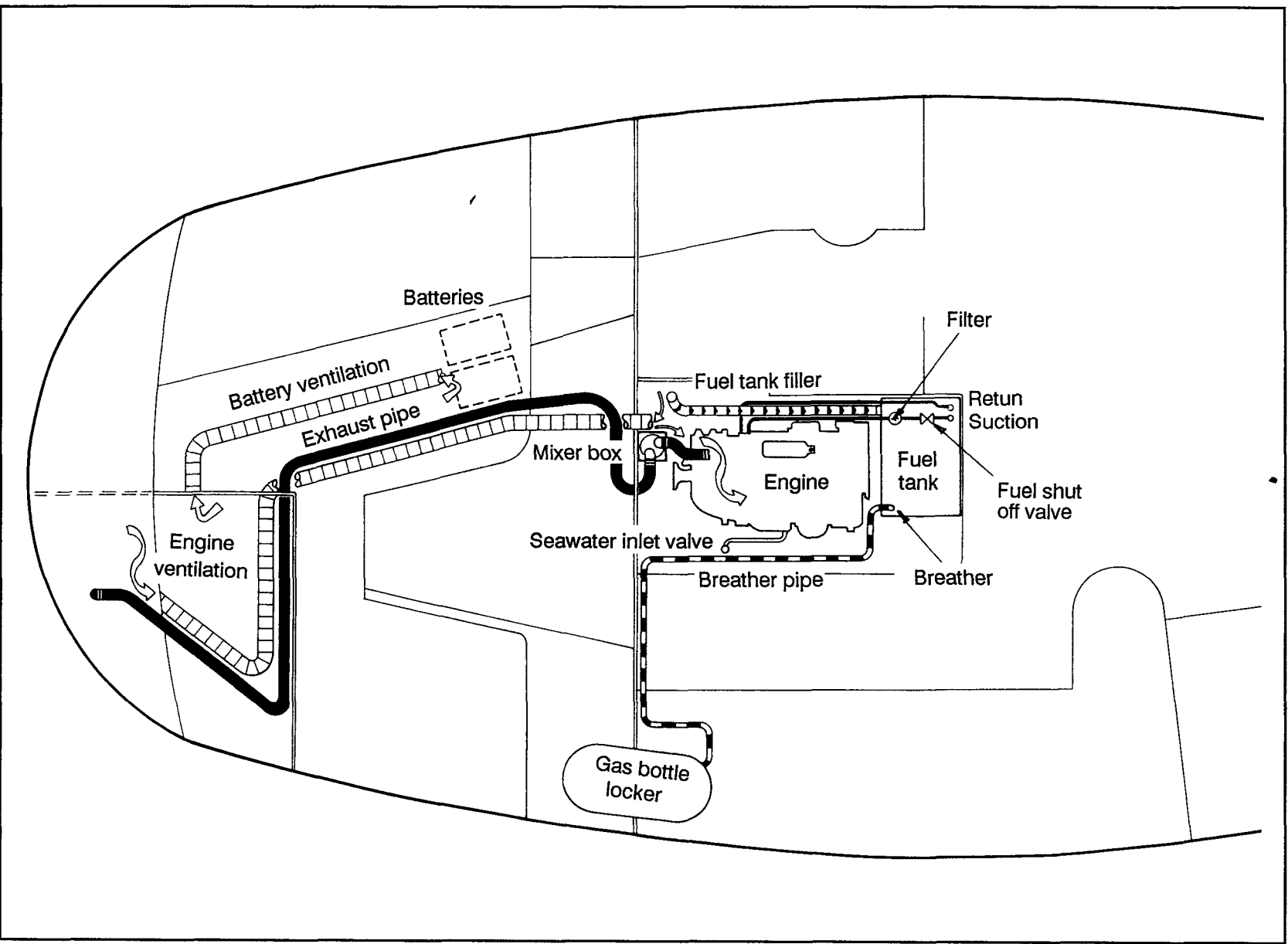


*Moody 31 Engine System Installation*

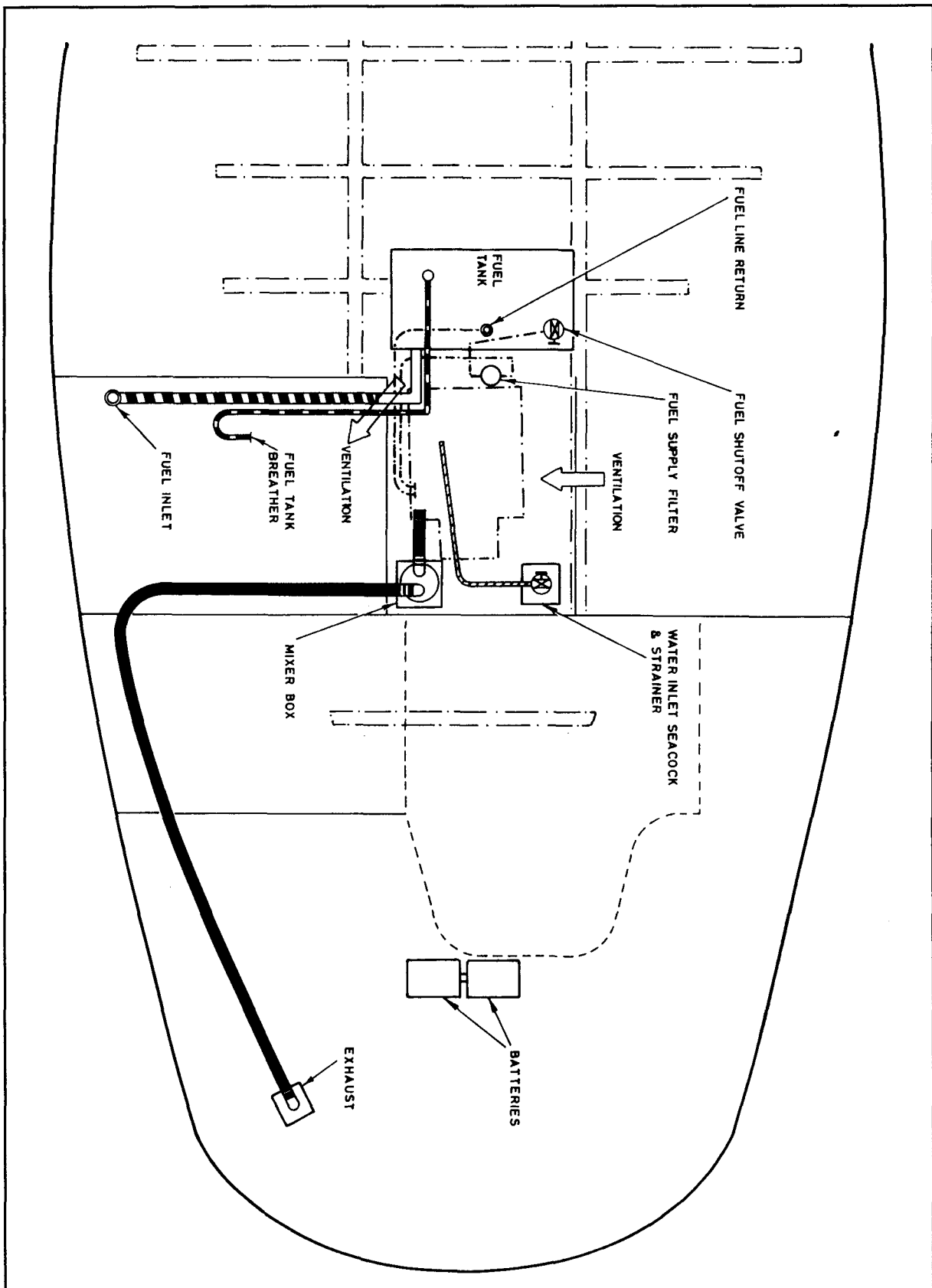


*Moody 336 Engine System Installation*

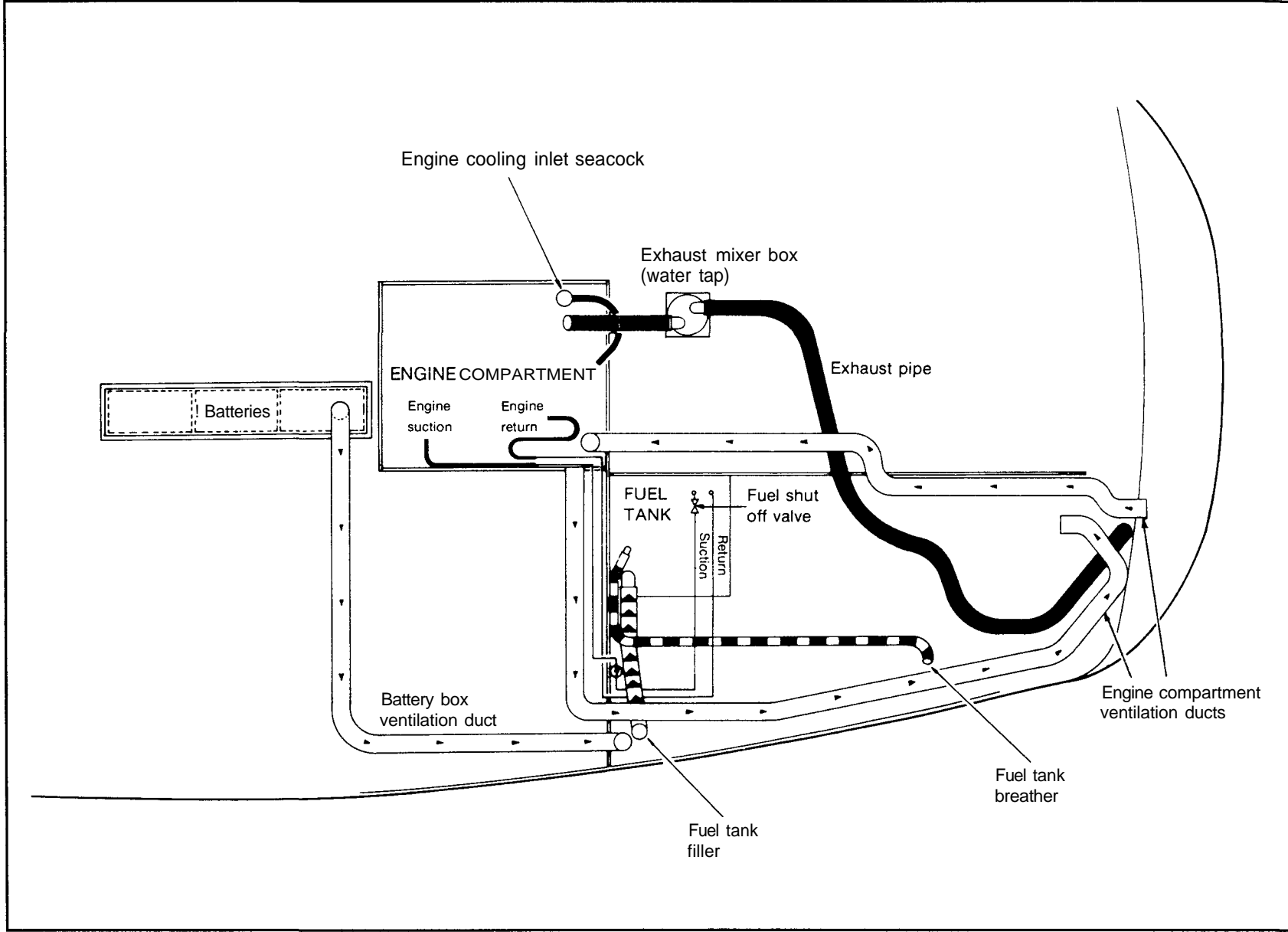




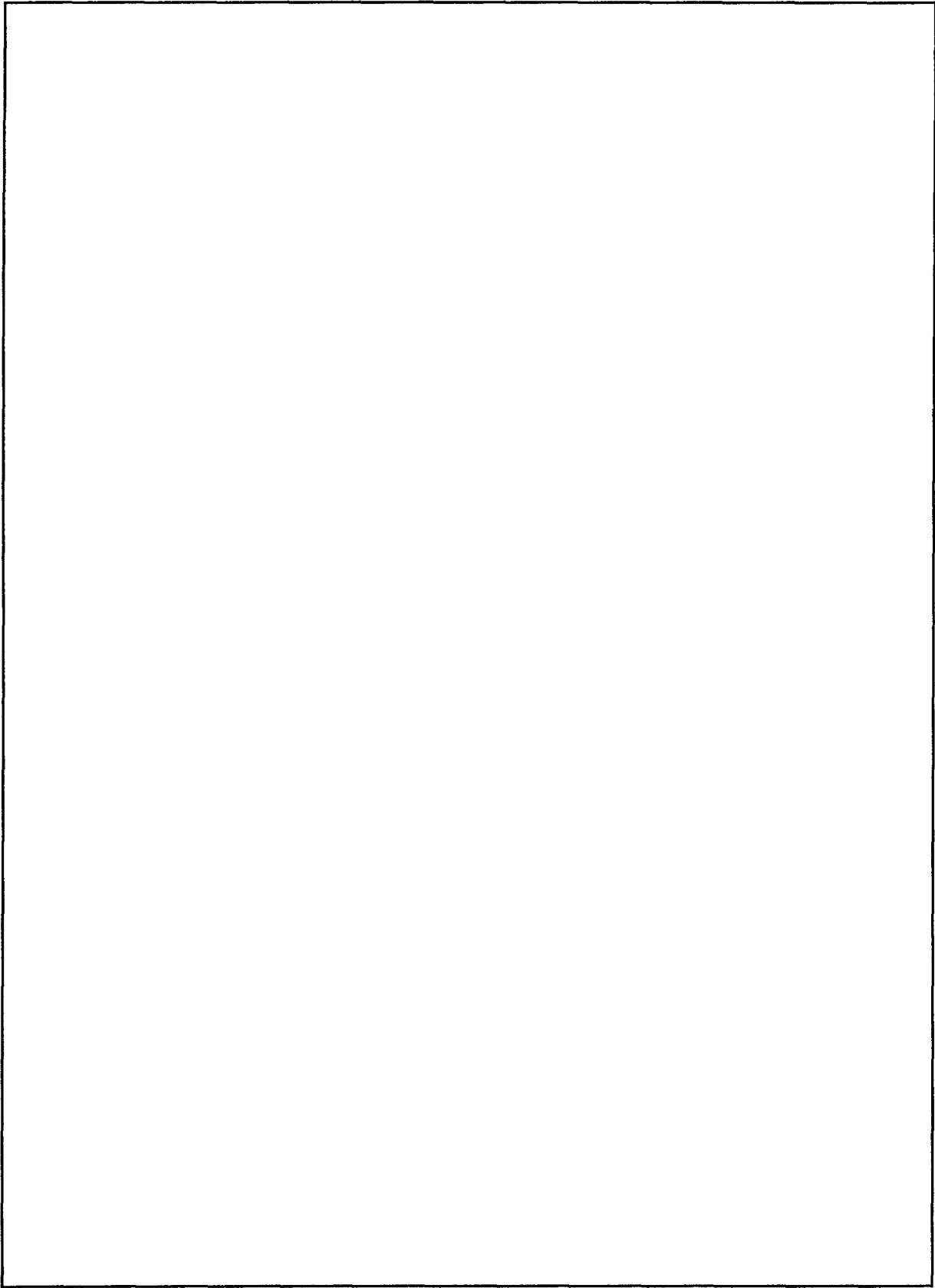
Moody 35  100 m Installations



*Moody 376 Engine System Installation*

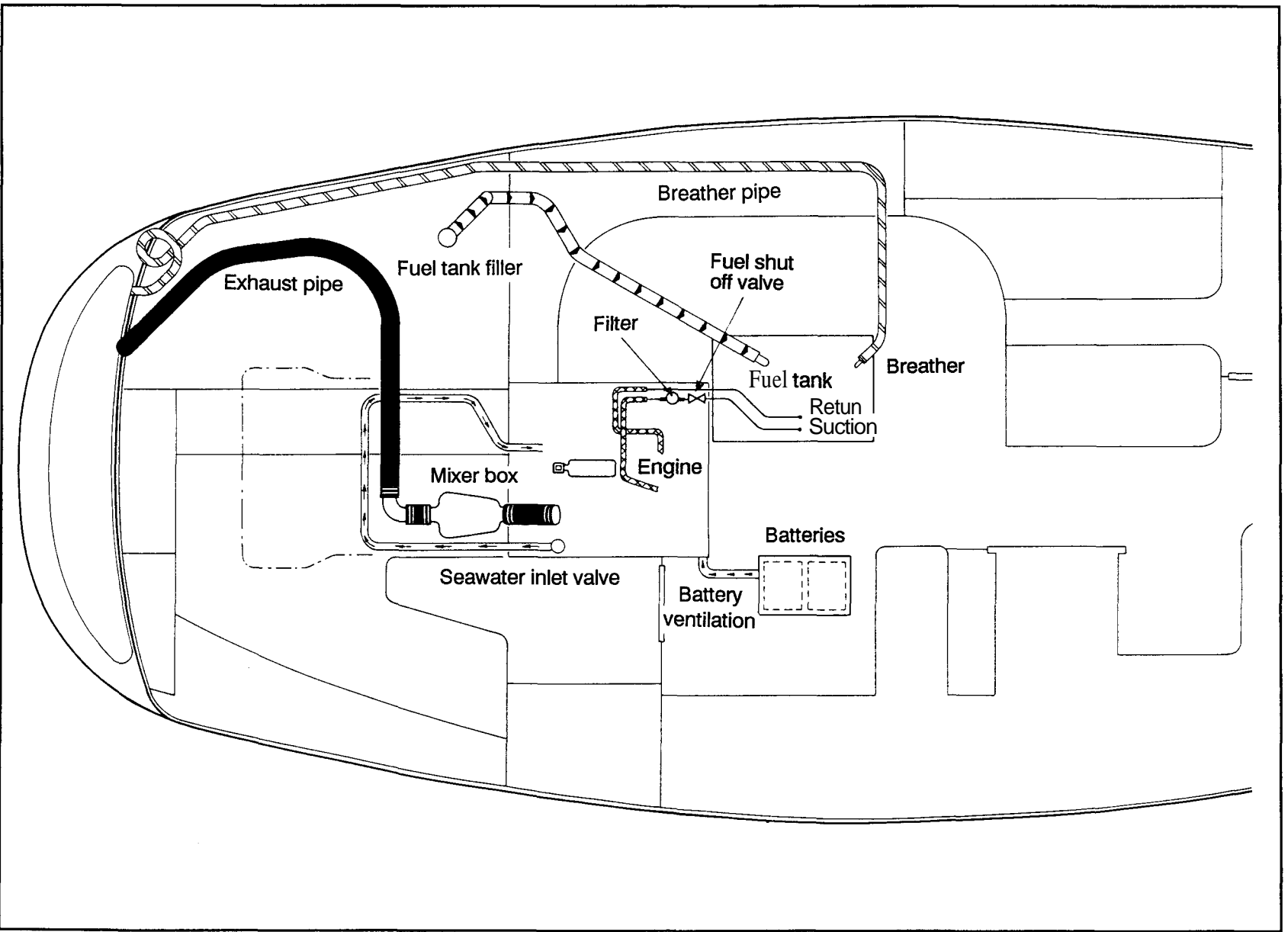


*Ecl 33 engine system installation*



*Eclipse 38 engine system installation*





*Eclipse 43* ← *Power system installation*

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# Utilities

## *Electrical systems*

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The individual electrical systems are illustrated on pages 5.4 to 5.13.

### *Batteries - 12V system*

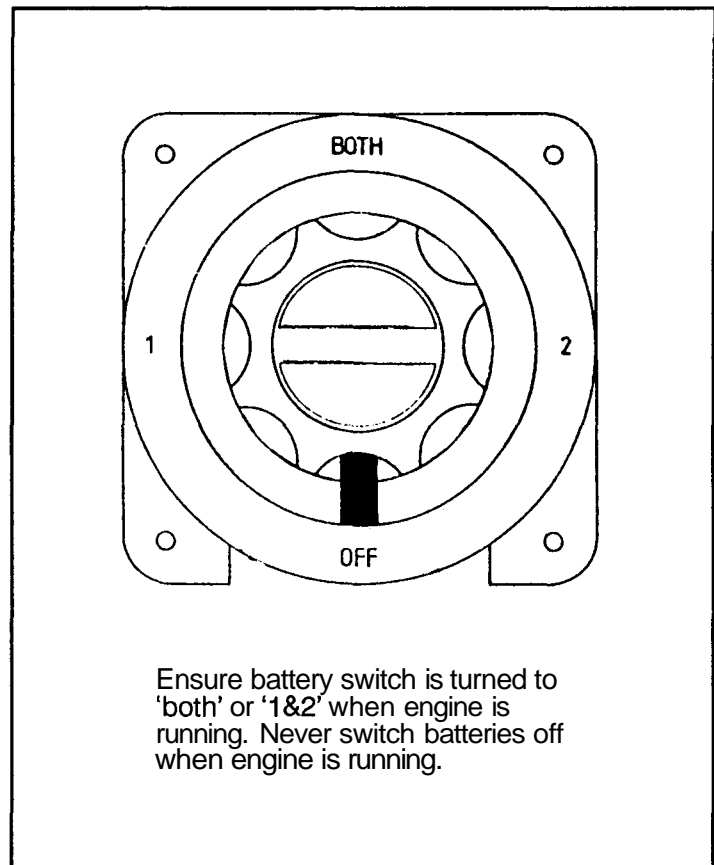
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Most yachts use a 12 Volt electrical system with either two or three batteries. Batteries will deteriorate rapidly if not maintained correctly.

#### *Battery isolation switch*

All yachts are fitted with a four way battery isolation switch which allows the batteries to be connected in parallel for engine starting. The following points should be noted:-

- 1 Always switch off batteries when not required or on charge.
- 2 Use one battery for the engine and the other for auxiliary uses. When the auxiliary battery becomes flat, start the engine using the engine battery and fully charge the system.
- 3 Ensure that auxiliary batteries are always fully charged, enabling them to be used to start the engine should the engine battery be flat.



*Battery isolation switch*

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## *Shore power - 240V system*

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The standard shore power system consists of:

Input socket  
Residual current operated circuit breaker  
Main double pole circuit breaker  
Polarity test system  
Voltimeter  
Six circuit breaker/switches

### *Input socket*

Situated in the cockpit area, this is used to connect the boats system to the supply from the shore. The standard socket is a 220/240V 15A type.

### *Residual current circuit breaker (RCCB)*

Situated in the engine room/sail locker between the input socket and the main distribution panel, this is a 30mA type and is used to protect the system and its users. This device will trip out if there is a voltage change between positive and negative anywhere in the boats 240 Volt system after this unit.

### *Main double pole circuit breaker*

Fitted in the distribution panel, this is used to protect the outlet system from overloading. When the switch is on you will get a voltage reading on the voltimeter, The standard loading is 15A if the total load exceeds this the switch will go to the off position.

### *Polarity test system*

Fitted in the distribution panel, this consists of three LED's, one orange and two red, positioned on the distribution panel. It is used to ensure that the polarity of the supply to the boats system is correct. When the polarity is correct the two red lights will come on, if the polarity is incorrect the orange or orange and red lights will light up.

---

### ***Circuit breaker/switches***

All situated in the distribution panel. To switch the ring main (plug sockets) on, push the switch in when the system is on, the LED next to the switch will light up. The maximum loading on this circuit is the same as the total system 15A and if the load exceeds this it will switch off automatically.

### ***Battery charge***

For charger operation consult operators manual.

### ***Water heater***

If factory fitted this will be a 1KW type. To switch on operate as ring main, the temperature of the water can be adjusted on the thermostat located in the top of the heater element. Ensure the fresh water system is switched on before operating the water heater.

### ***Spare switches***

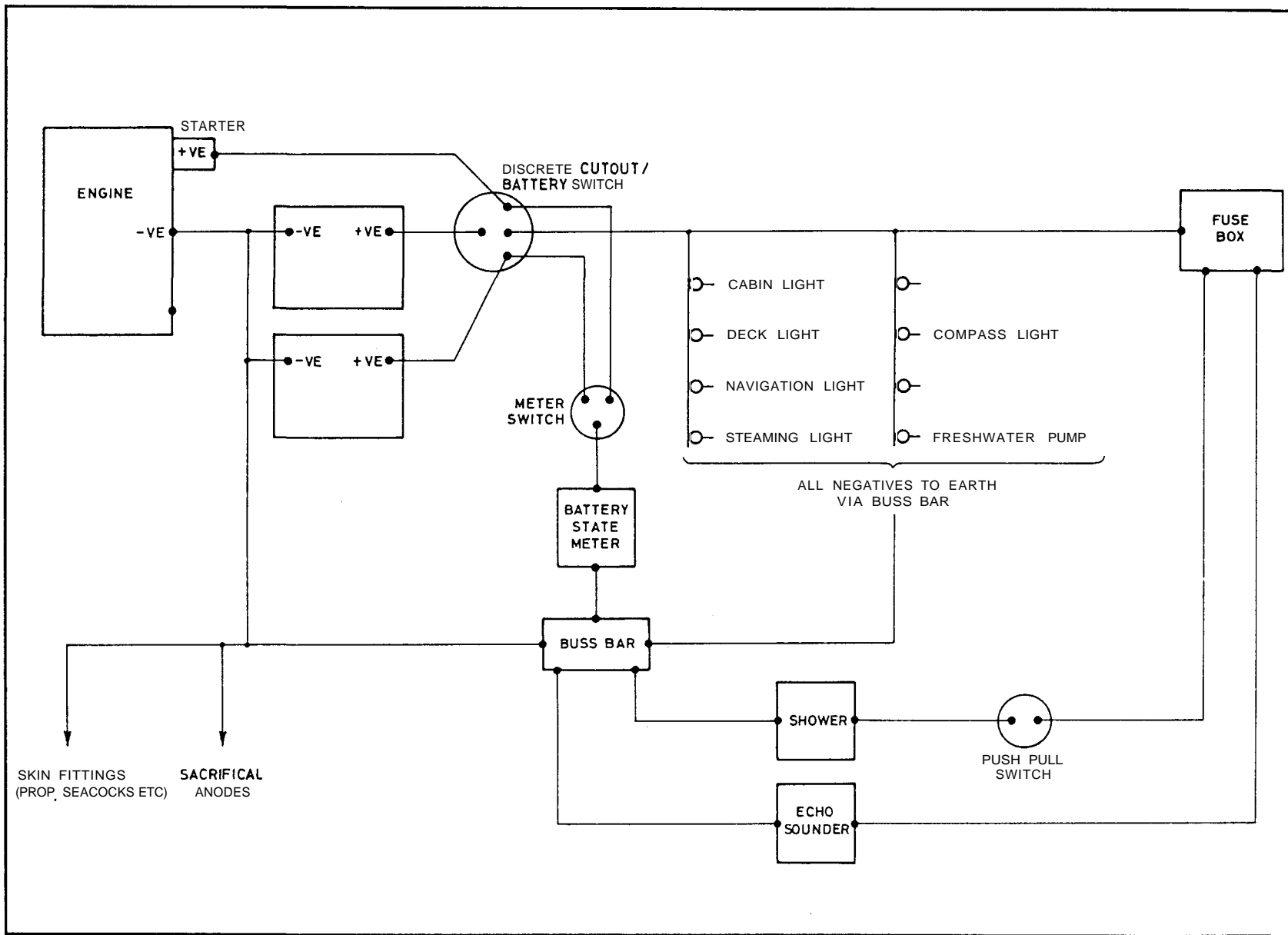
Can be used for any additional requirement but the load rating should be checked if used.

### ***Connection instructions***

- 1 Check that the RCCB and the Double Pole Circuit Breaker Switch is in the off position.
- 2 Plug in the Shore Support Socket and switch on supply from the shore.
- 3 Test RCCB then reset.
- 4 Check polarity is correct.
- 5 Switch on double pull circuit breaker switch and check voltage on meter.
- 6 Switch on individual output systems as required.

*f If any of the switches will not stay in, do not hold them in. This will generally indicate that  
\* the circuit is overloaded for that size breaker or that there is a fault in the system or appliance being used in the particular circuit.*





Moody 31 Ele cal m

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### ***Circuit breaker/switches***

All situated in the distribution panel. To switch the ring main (plug sockets) on, push the switch in when the system is on, the LED next to the switch will light up. The maximum loading on this circuit is the same as the total system 15A and if the load exceeds this it will switch off automatically.

### ***Battery charge***

For charger operation consult operators manual.

### ***Water heater***

If factory fitted this will be a 1KW type. To switch on operate as ring main, the temperature of the water can be adjusted on the thermostat located in the top of the heater element. Ensure the fresh water system is switched on before operating the water heater.

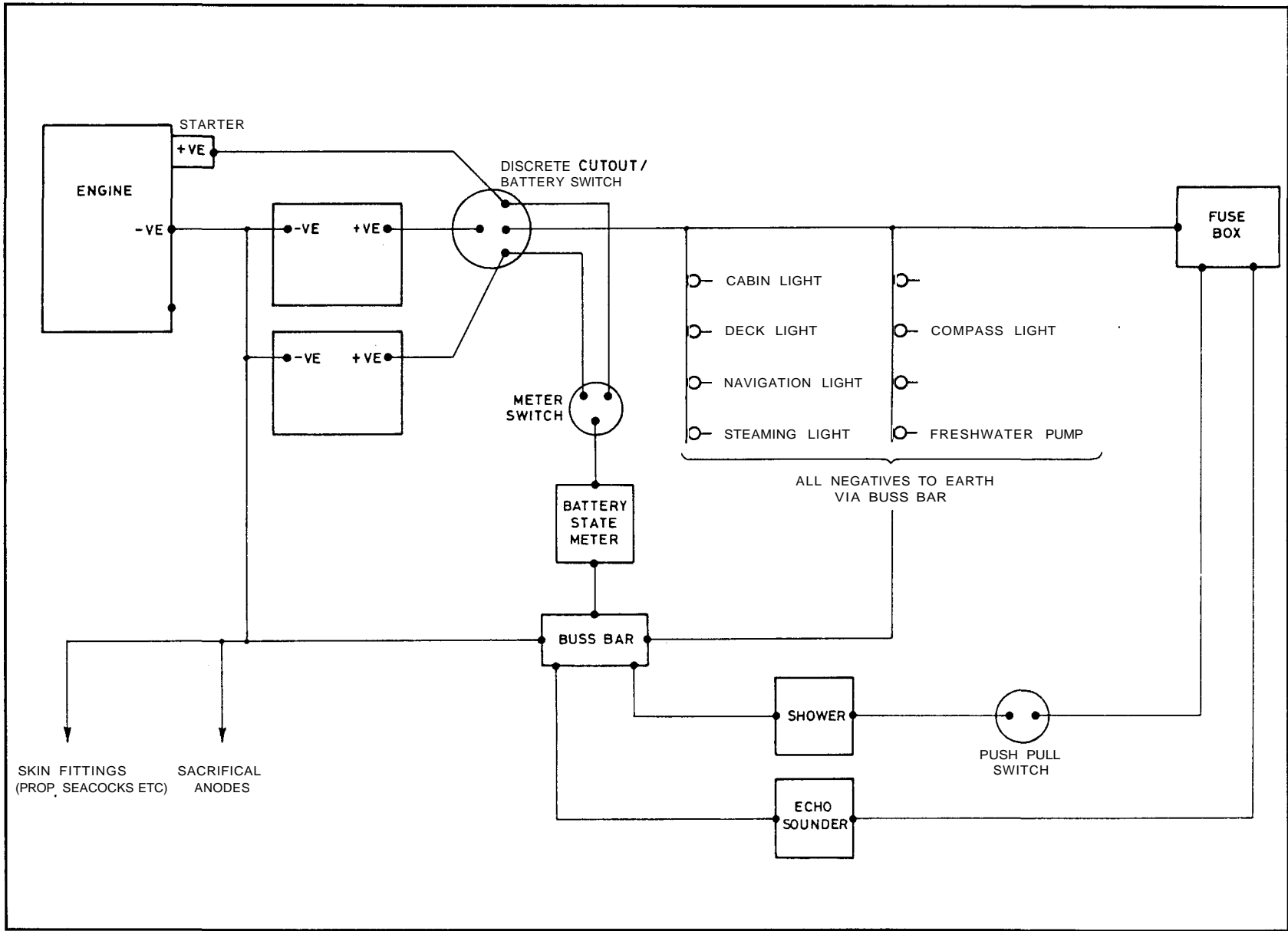
### ***Spare switches***

Can be used for any additional requirement but the load rating should be checked if used.

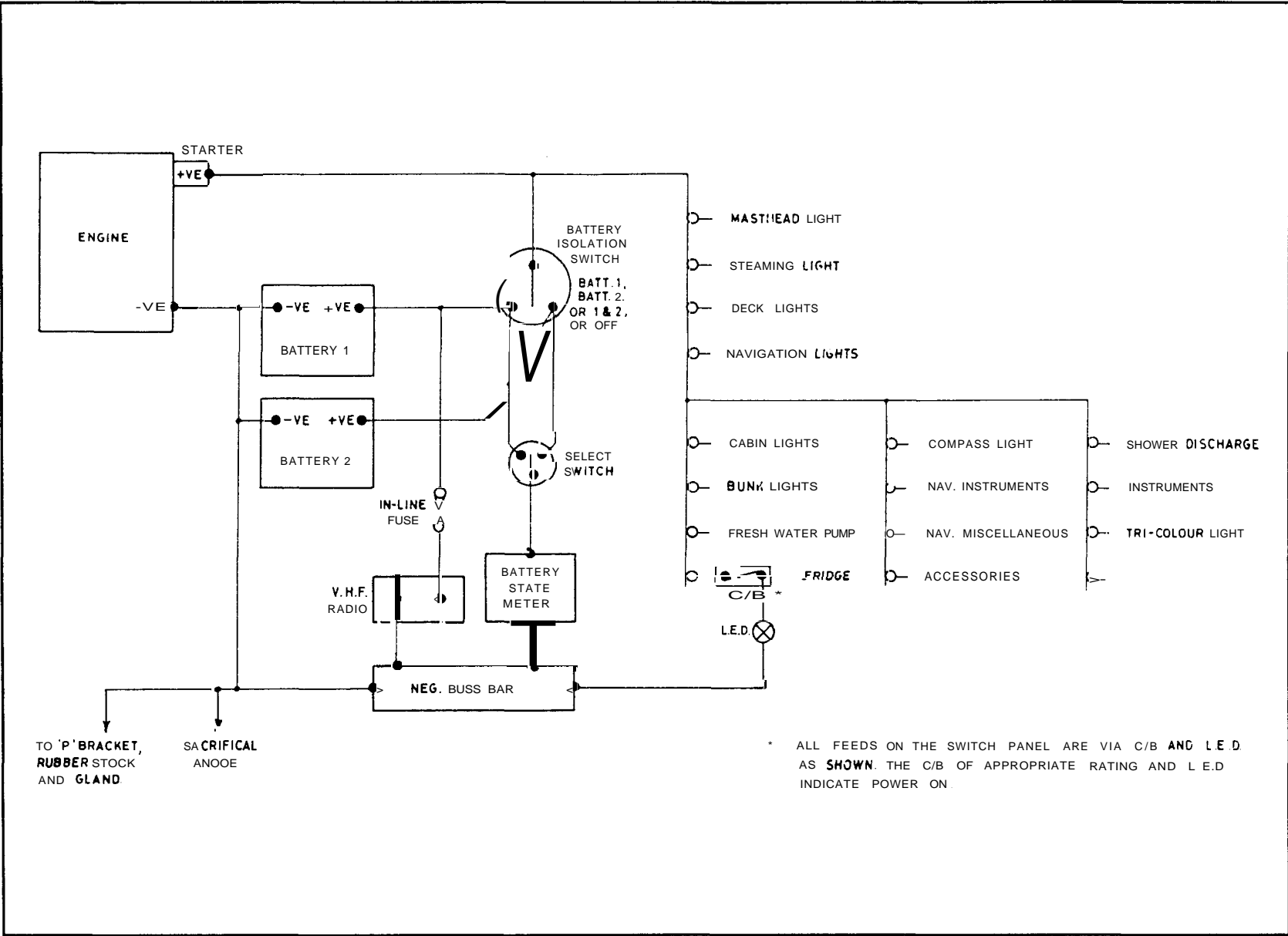
### ***Connection instructions***

- 1 Check that the RCCB and the Double Pole Circuit Breaker Switch is in the off position.
- 2 Plug in the Shore Support Socket and switch on supply from the shore.
- 3 Test RCCB then reset.
- 4 Check polarity is correct.
- 5 Switch on double pull circuit breaker switch and check voltage on meter.
- 6 Switch on individual output systems as required.

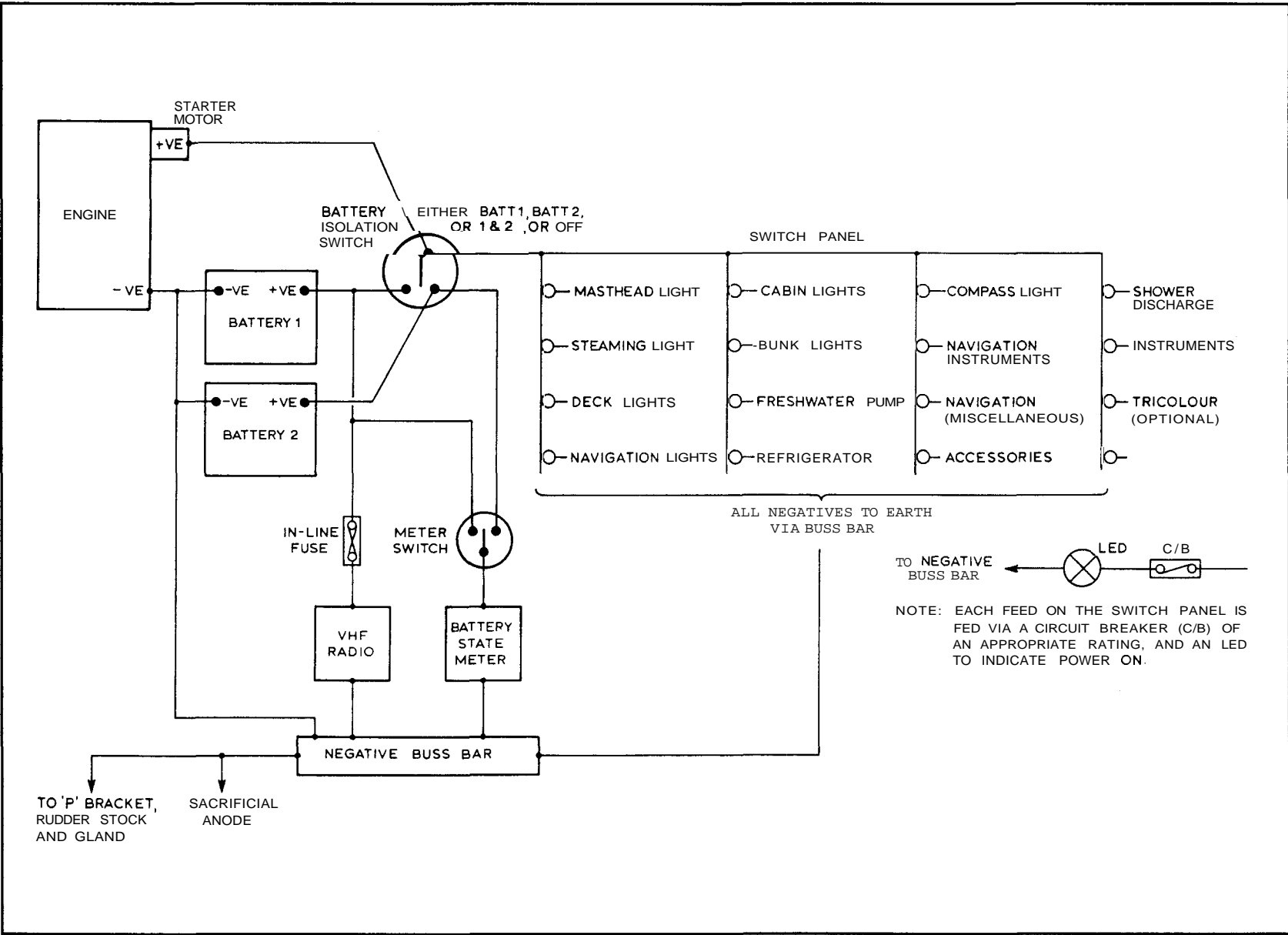
*f* If any of the switches will not stay in, do not hold them in. This will generally indicate that  
*\** the circuit is overloaded for that size breaker or that there is a fault in the system or appliance being used in the particular circuit.



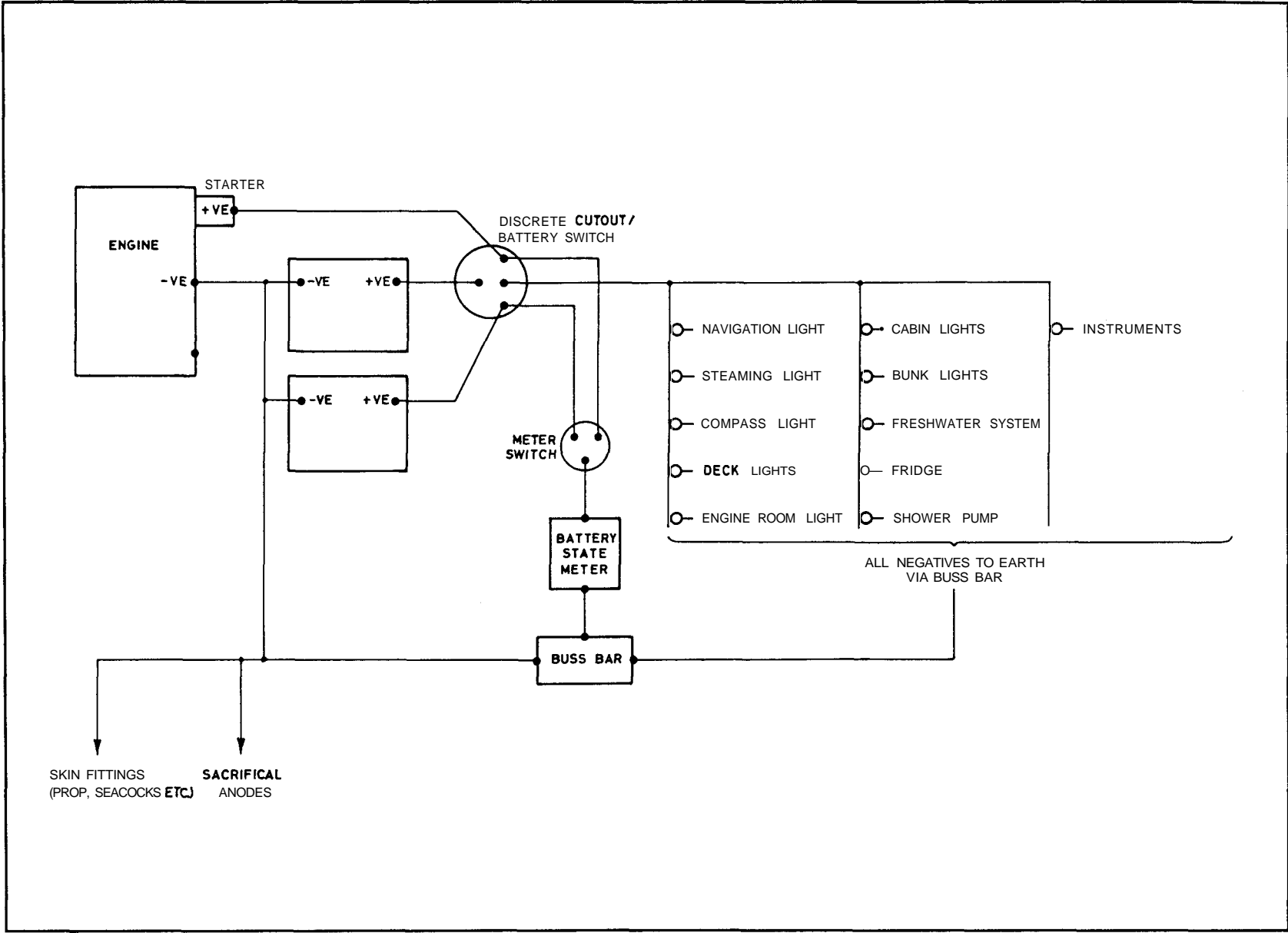
*Mot* 31 Electrical System



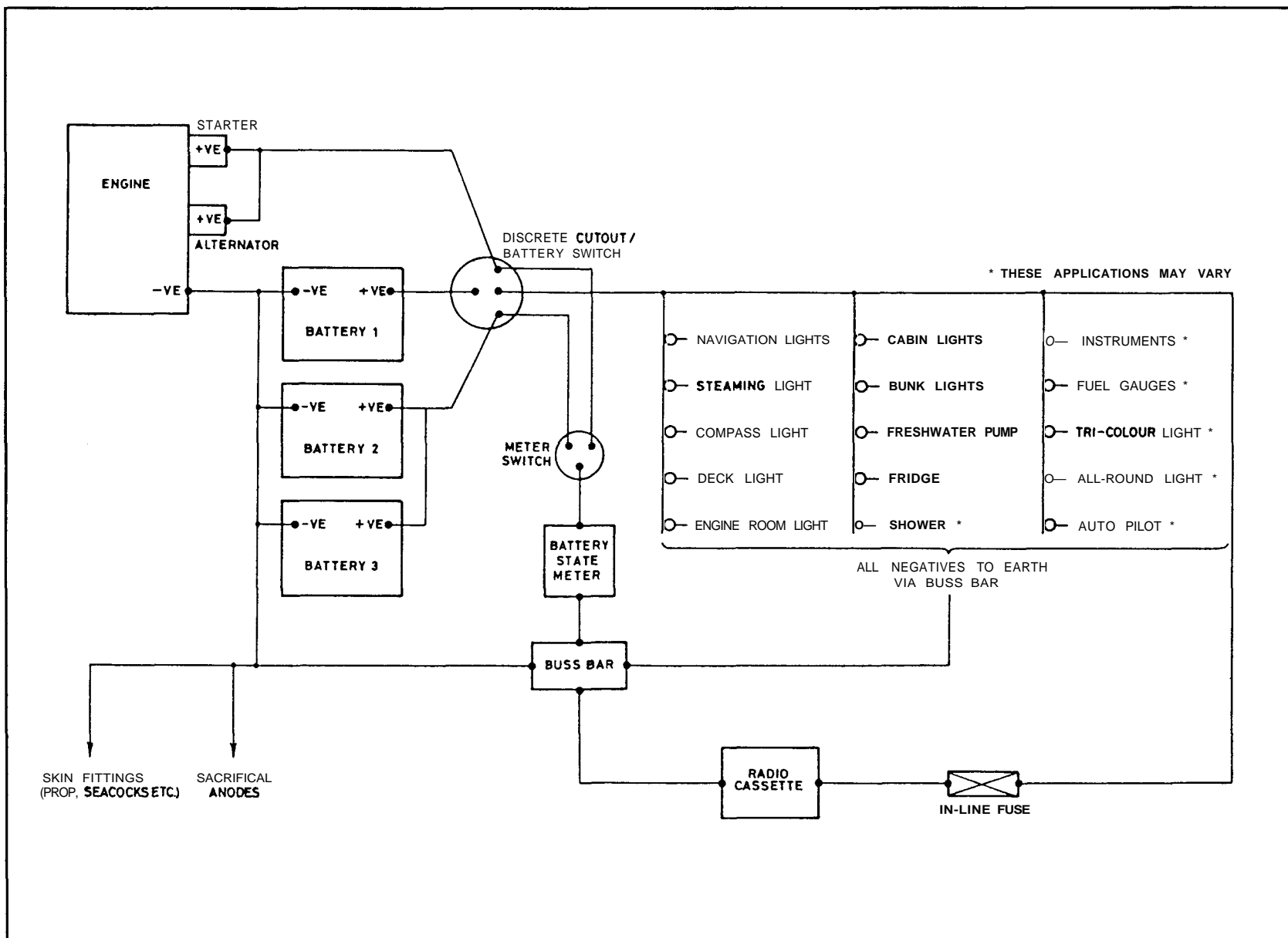
*M. 4 336 Electrical System*  
000



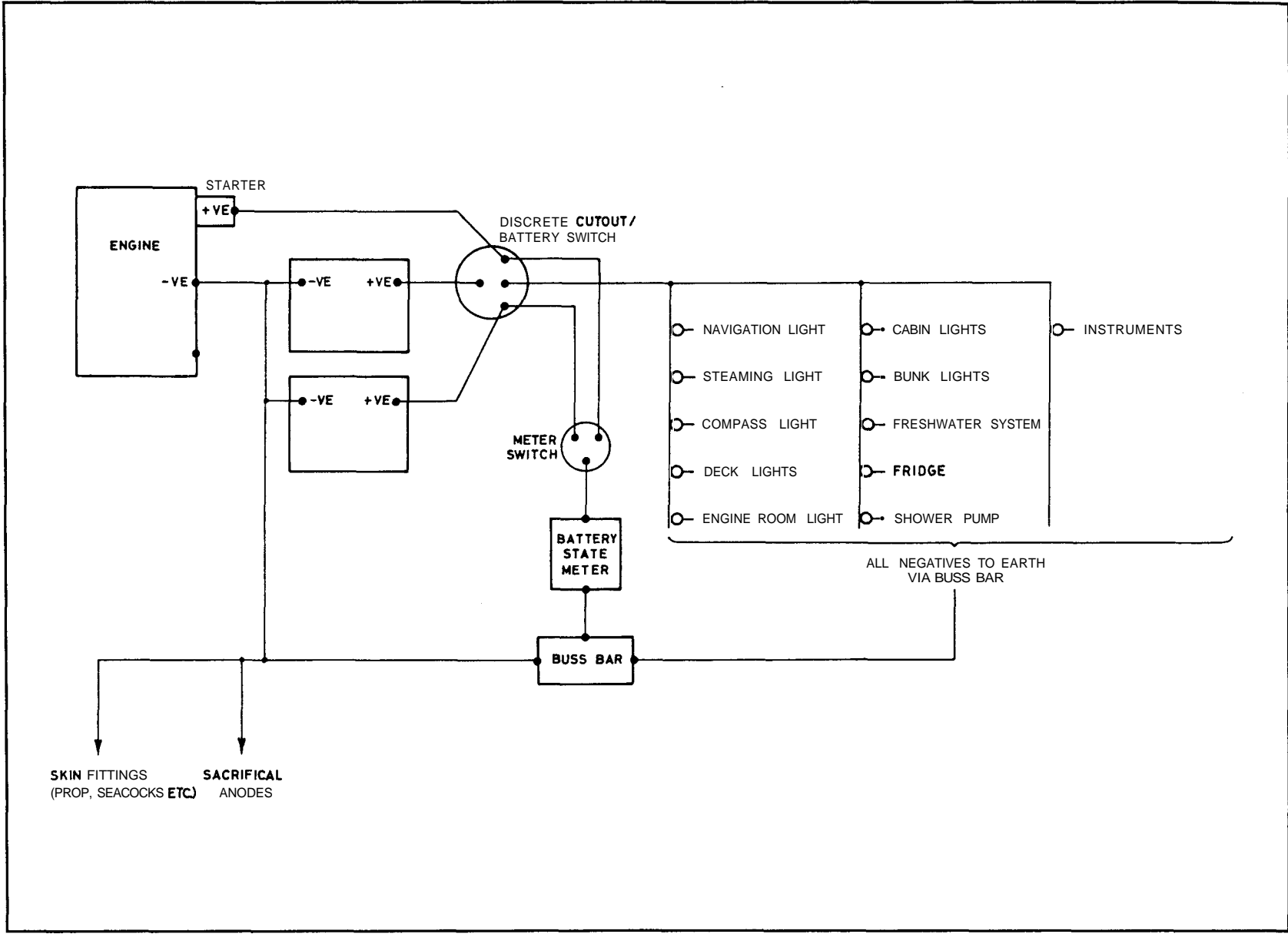
Moody 35 Electrical System



**M** 376 Electrical System

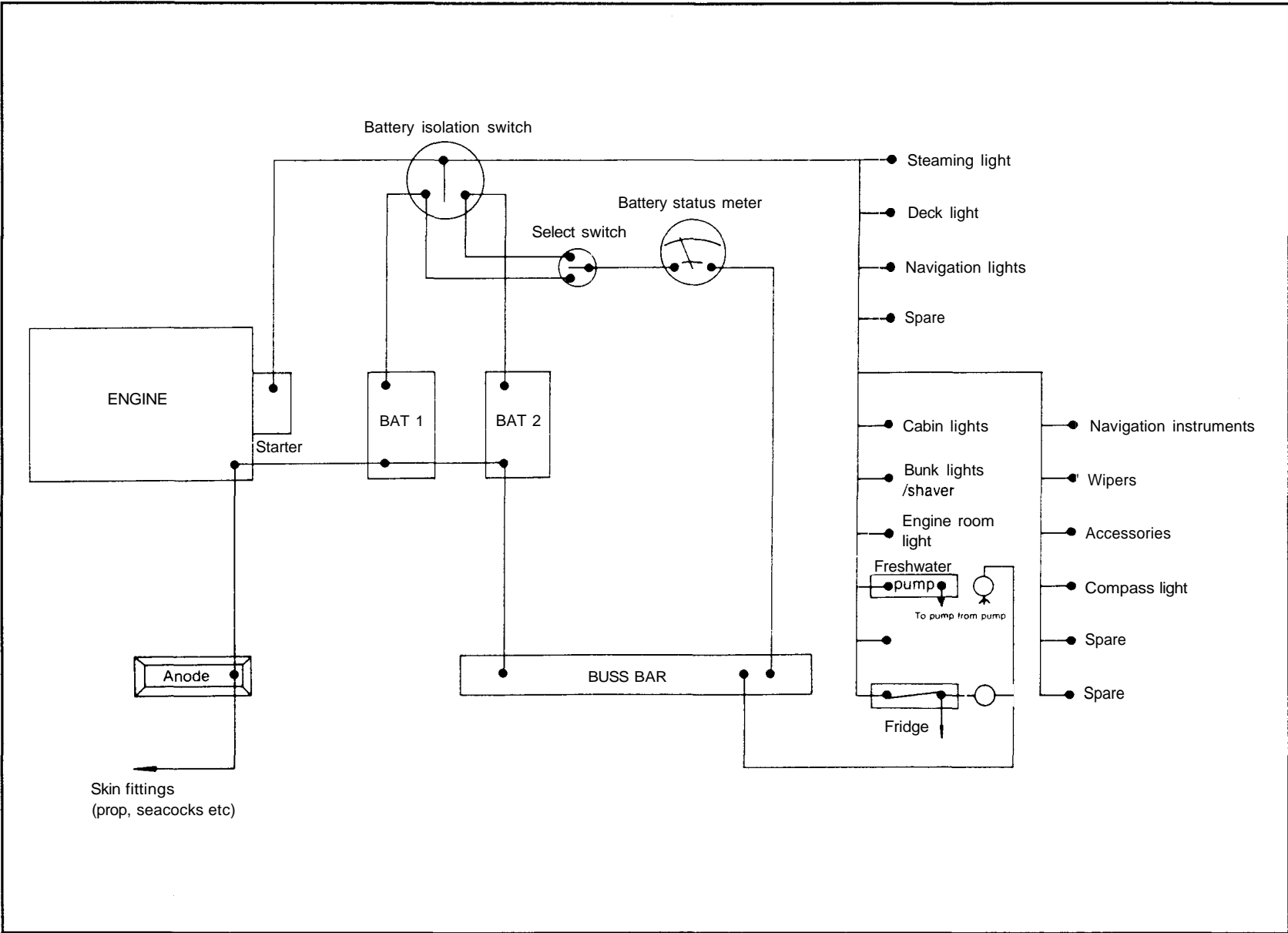


Moort 425 Electrical System

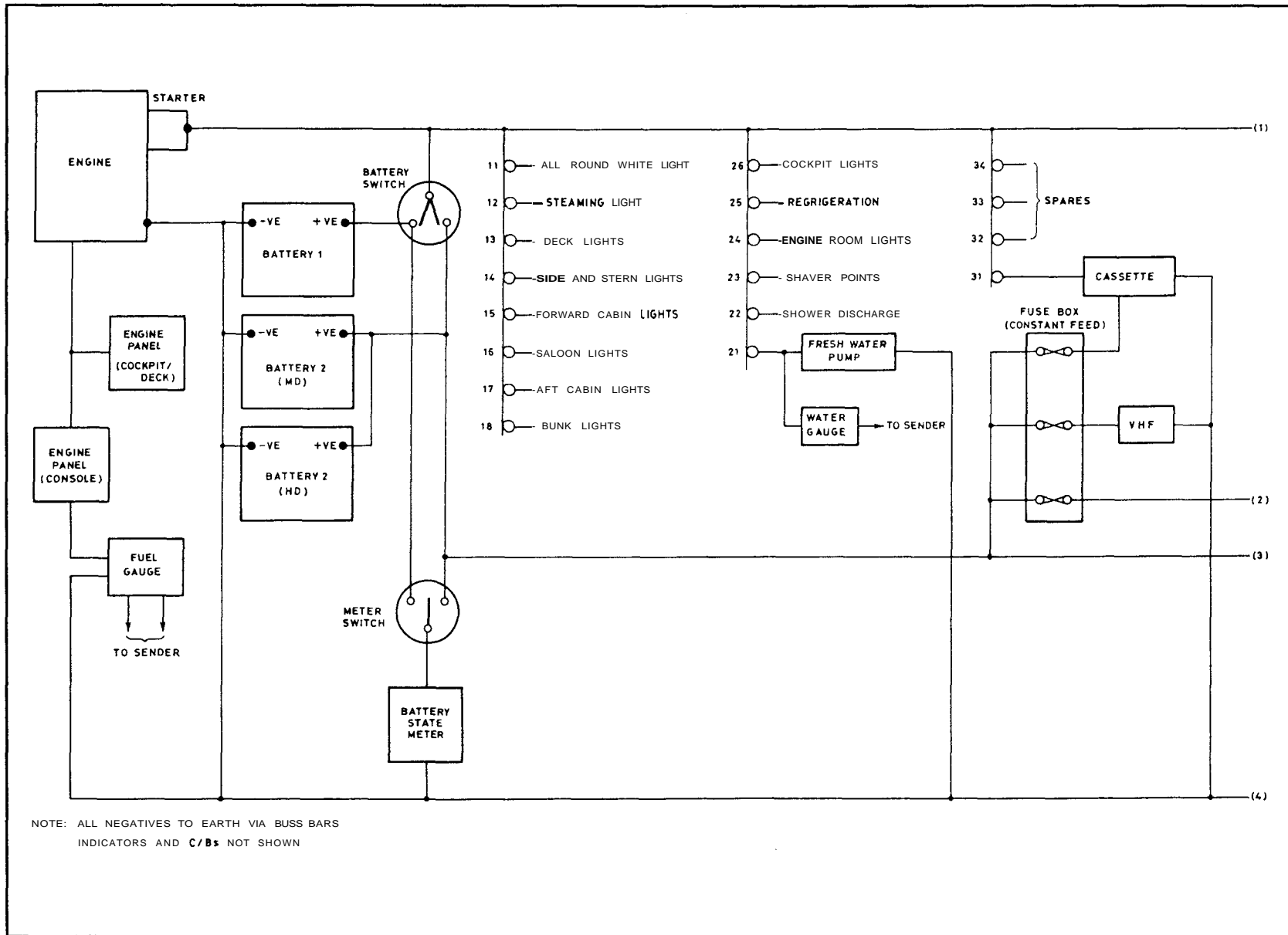


*Moody 376 Electrical System*

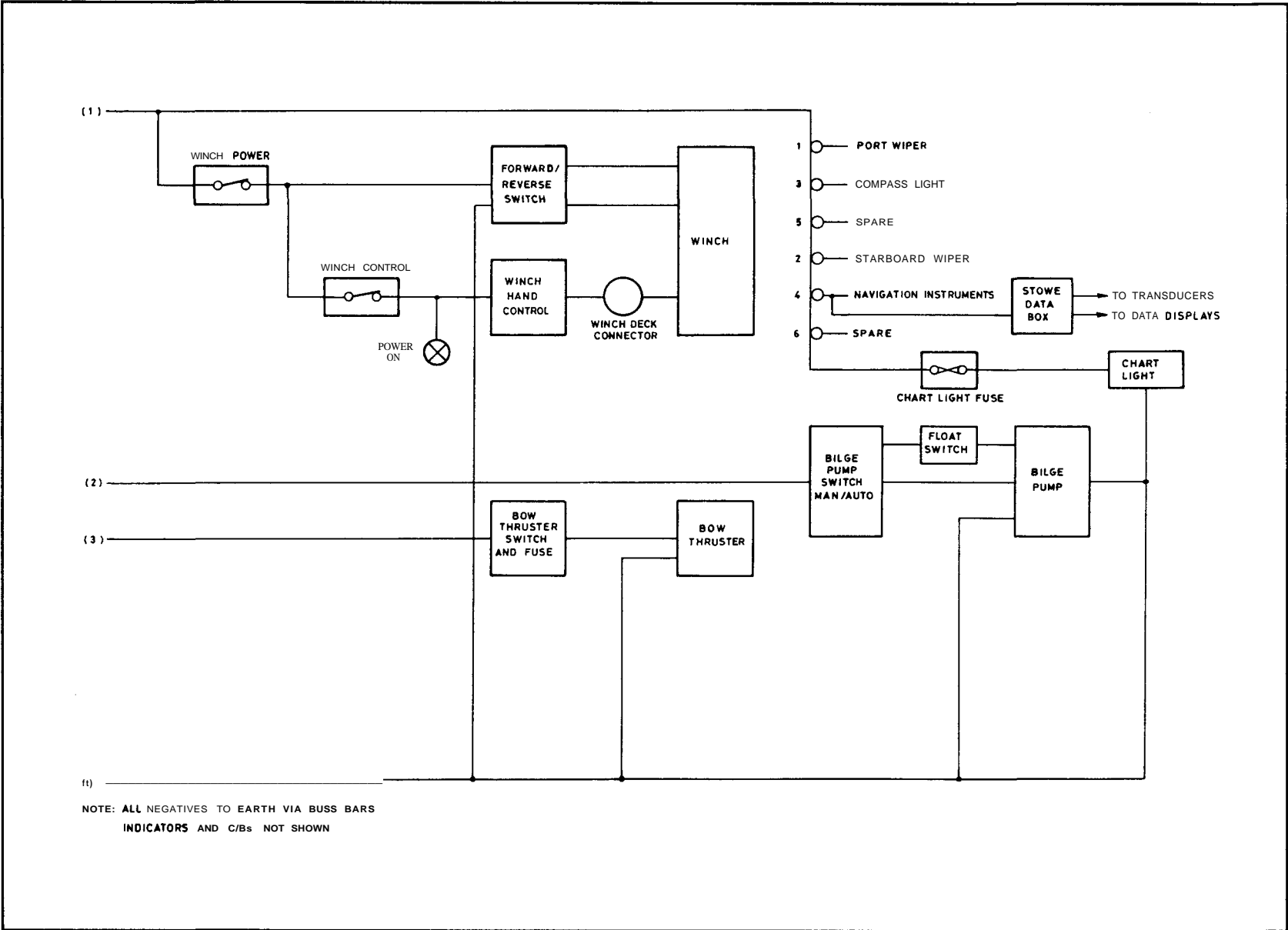




*Eclipse 33 Electrical System*

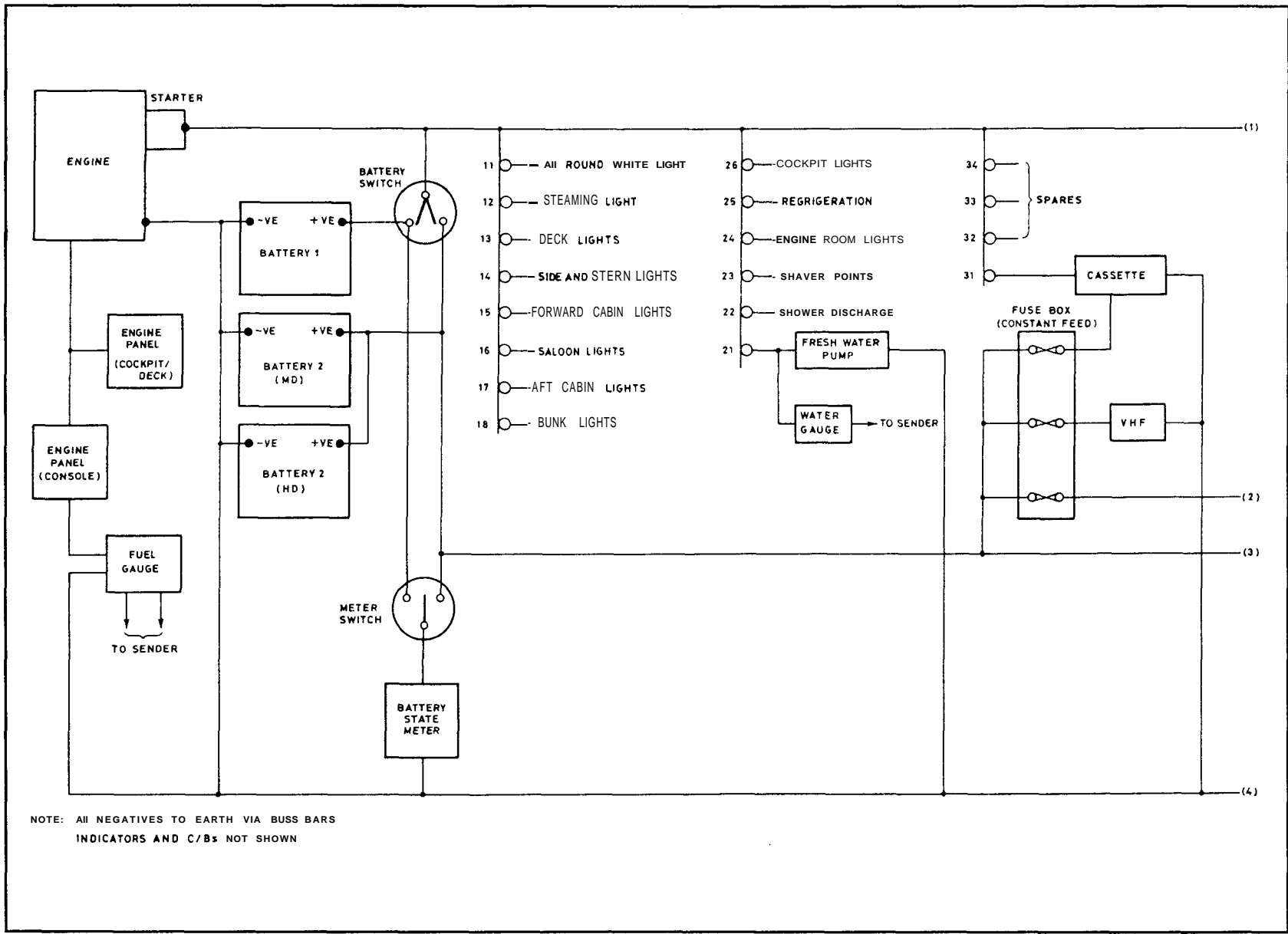


Ecl 43 Ele cal System

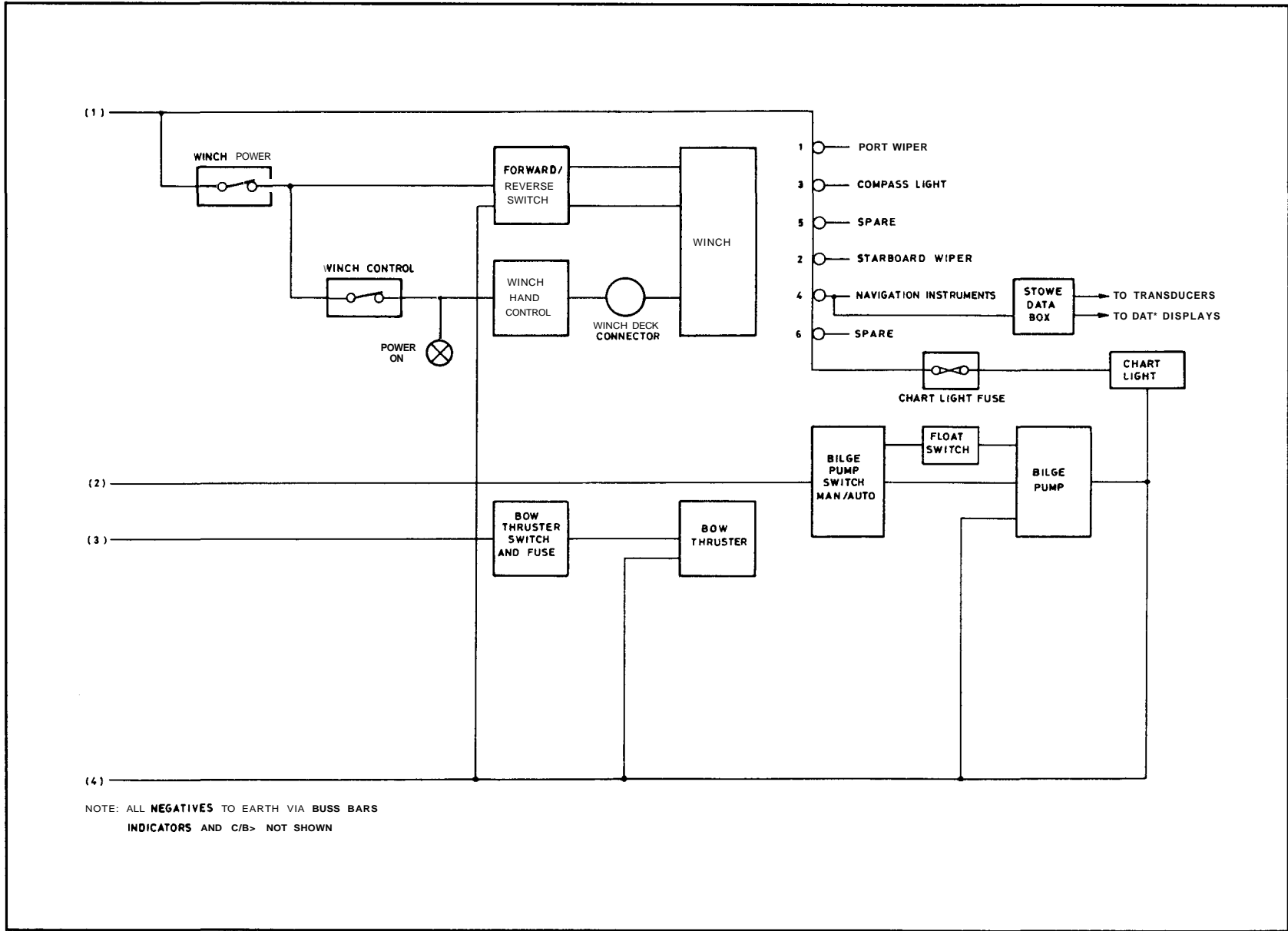


NOTE: ALL NEGATIVES TO EARTH VIA BUSS BARS  
INDICATORS AND C/Bs NOT SHOWN

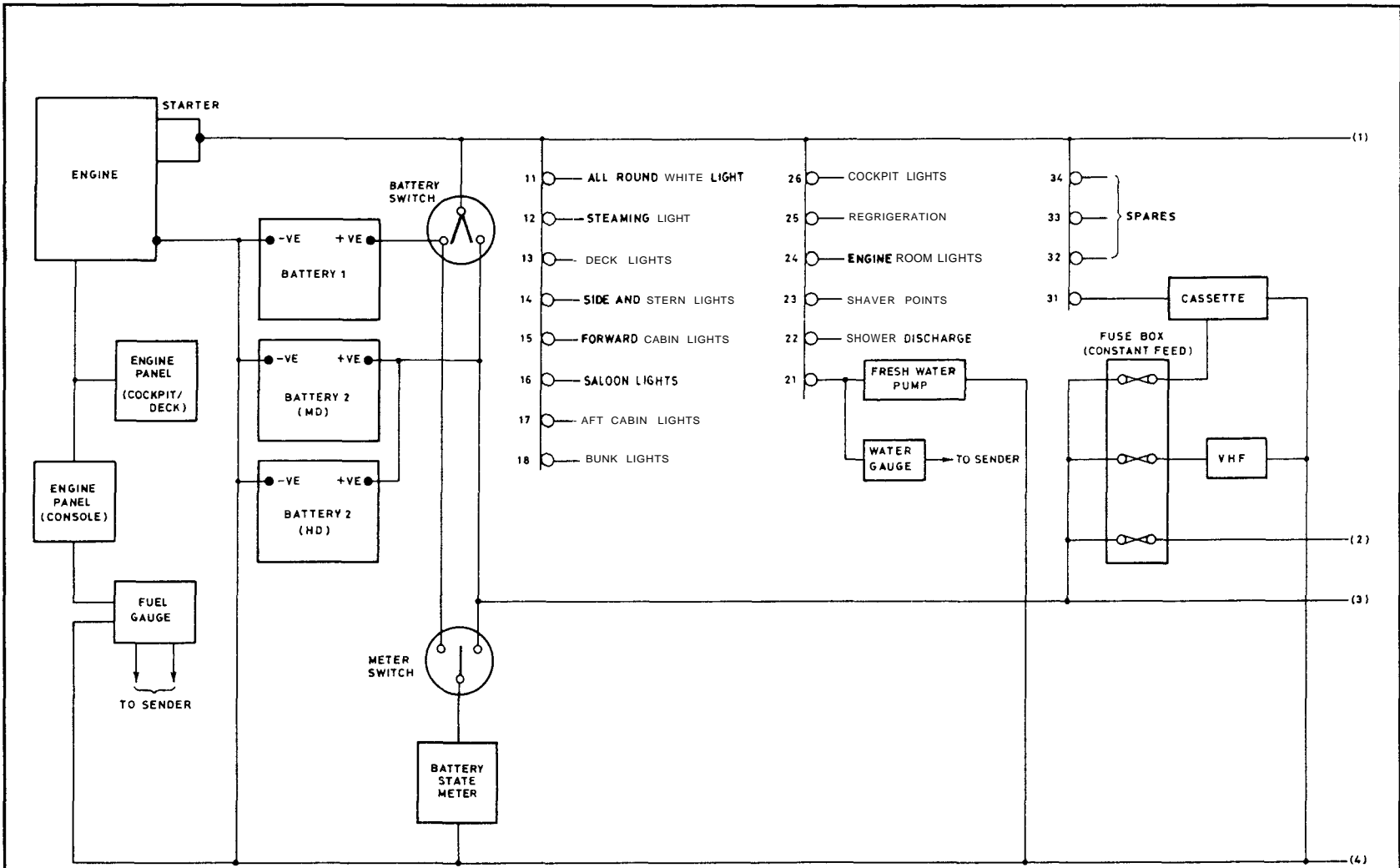
Eclipse 43 Electric *m*



Ecl 43 Electrical System

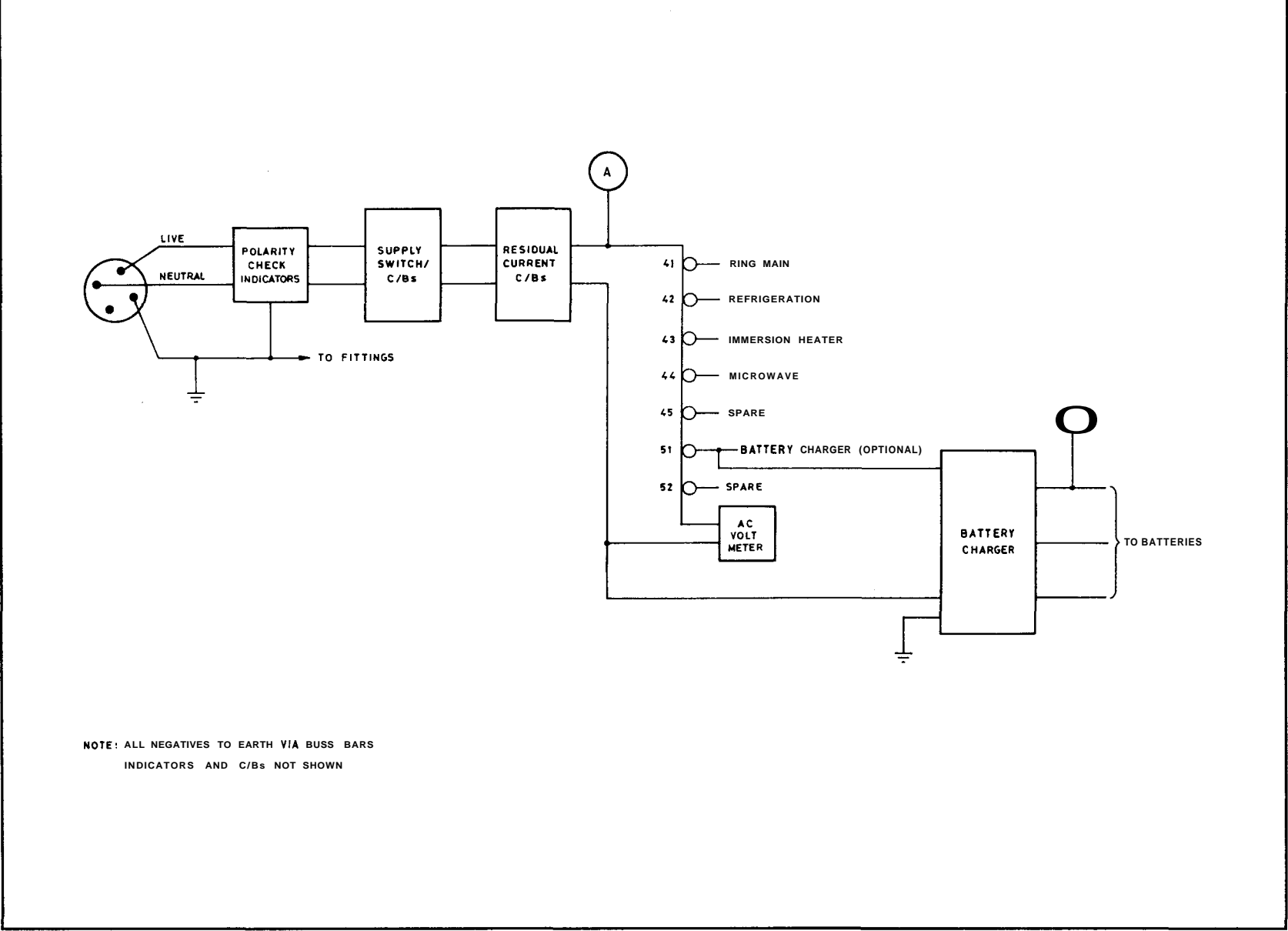


*Eclipse 43 Electrical System*



NOTE; ALL NEGATIVES TO EARTH VIA BUSS BARS  
INDICATORS AND C/Bs NOT SHOWN

*Eclipse 43 Electrical System*



NOTE: ALL NEGATIVES TO EARTH VIA BUSS BARS  
INDICATORS AND C/Bs NOT SHOWN

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## *Freshwater systems*

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Moody yachts have either manually pumped cold water systems or pressurised hot and cold water systems. The manually pumped systems use either hand or foot pumps supplied from a freshwater tank.

### *Water Tanks*

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Where twin tanks are fitted they are connected by a balance pipe. The tanks are filled through a single pipe and therefore time should be allowed for the water level to stabilise during filling operations.

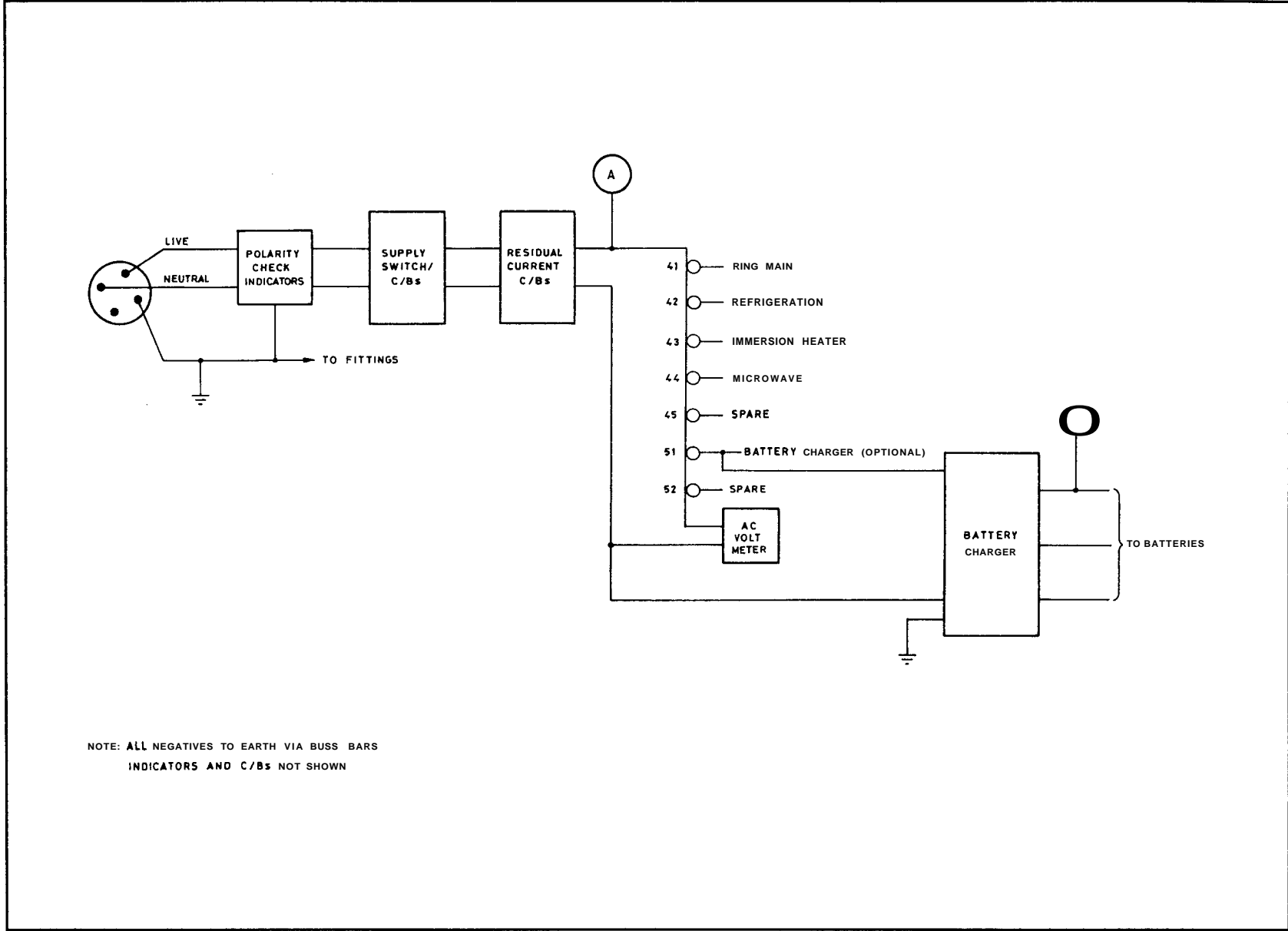
Yacht	Freshwater tank capacity (litres)
Moody 31	136
Moody 336	202
Moody 35	195
Moody 376	250
Moody 425	409
Eclipse 33	341
Eclipse 38	322
Eclipse 43	455

### *Pressure Pump*

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The pressure pump is an impeller type which is water lubricated and should never be run dry.





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## *Freshwater systems*

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Moody yachts have either manually pumped cold water systems or pressurised hot and cold water systems. The manually pumped systems use either hand or foot pumps supplied from a freshwater tank.

### *Water Tanks*

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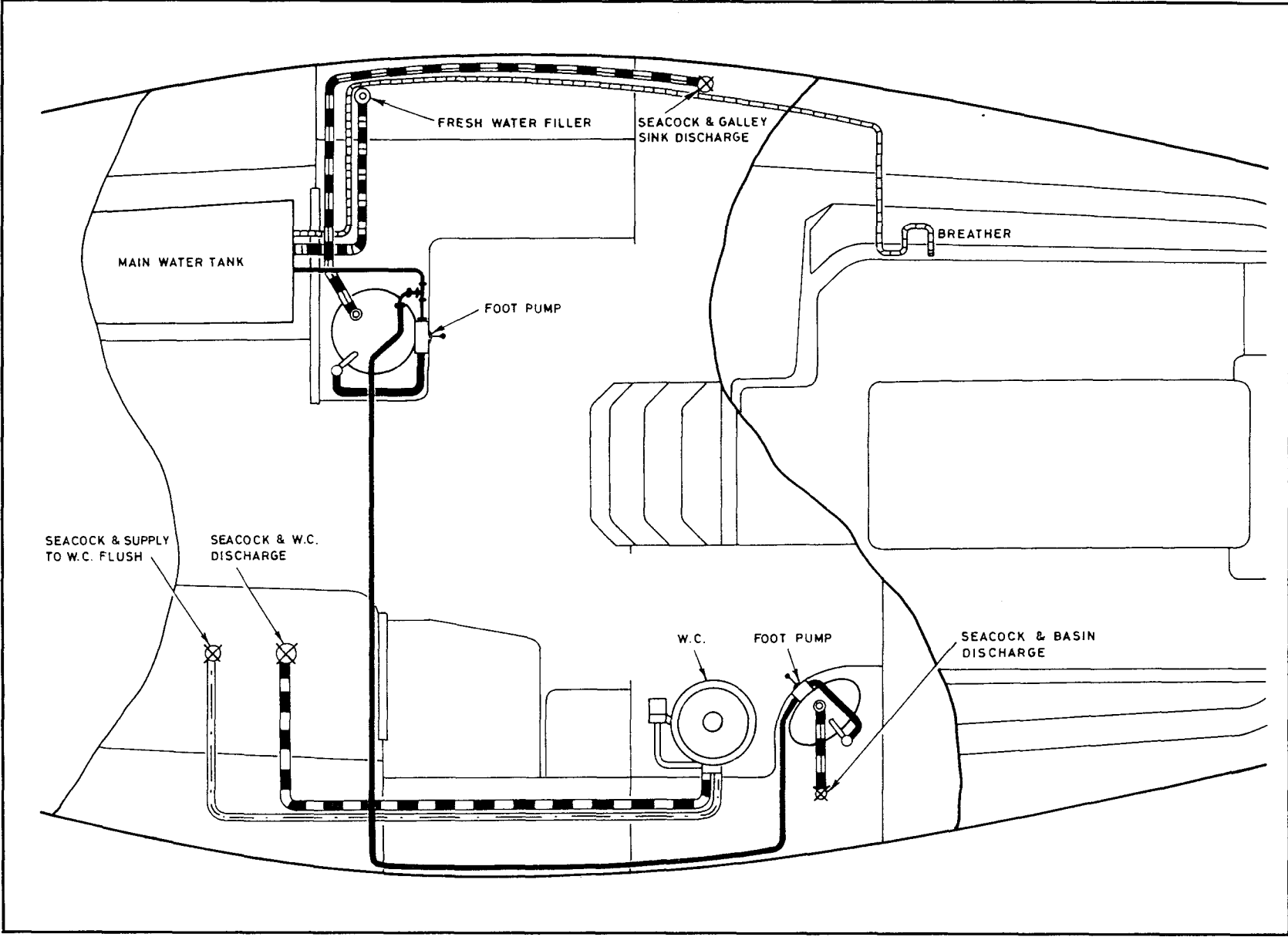
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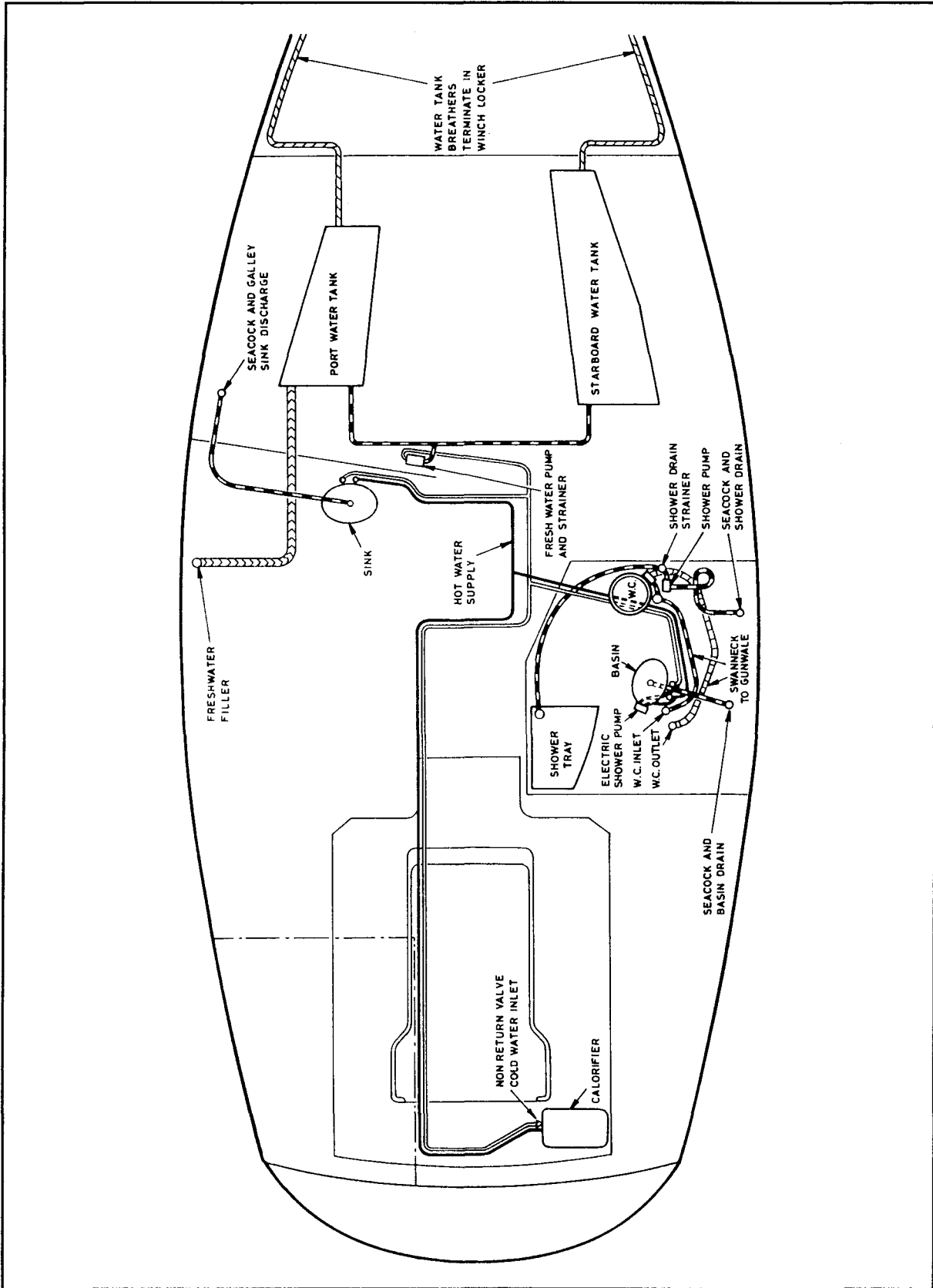
### *Pressure Pump*

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The pressure pump is an impeller type which is water lubricated and should never be run dry.

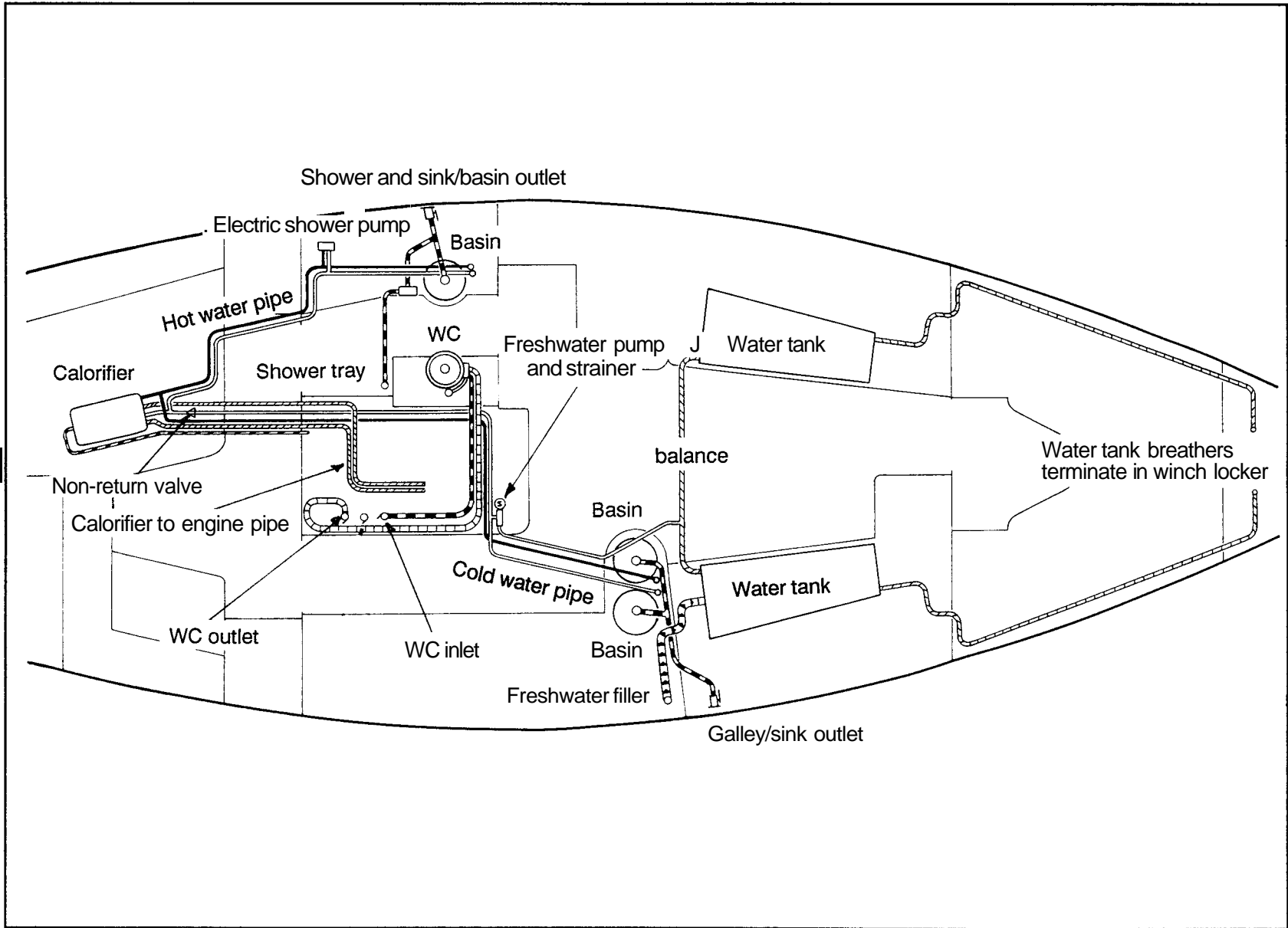


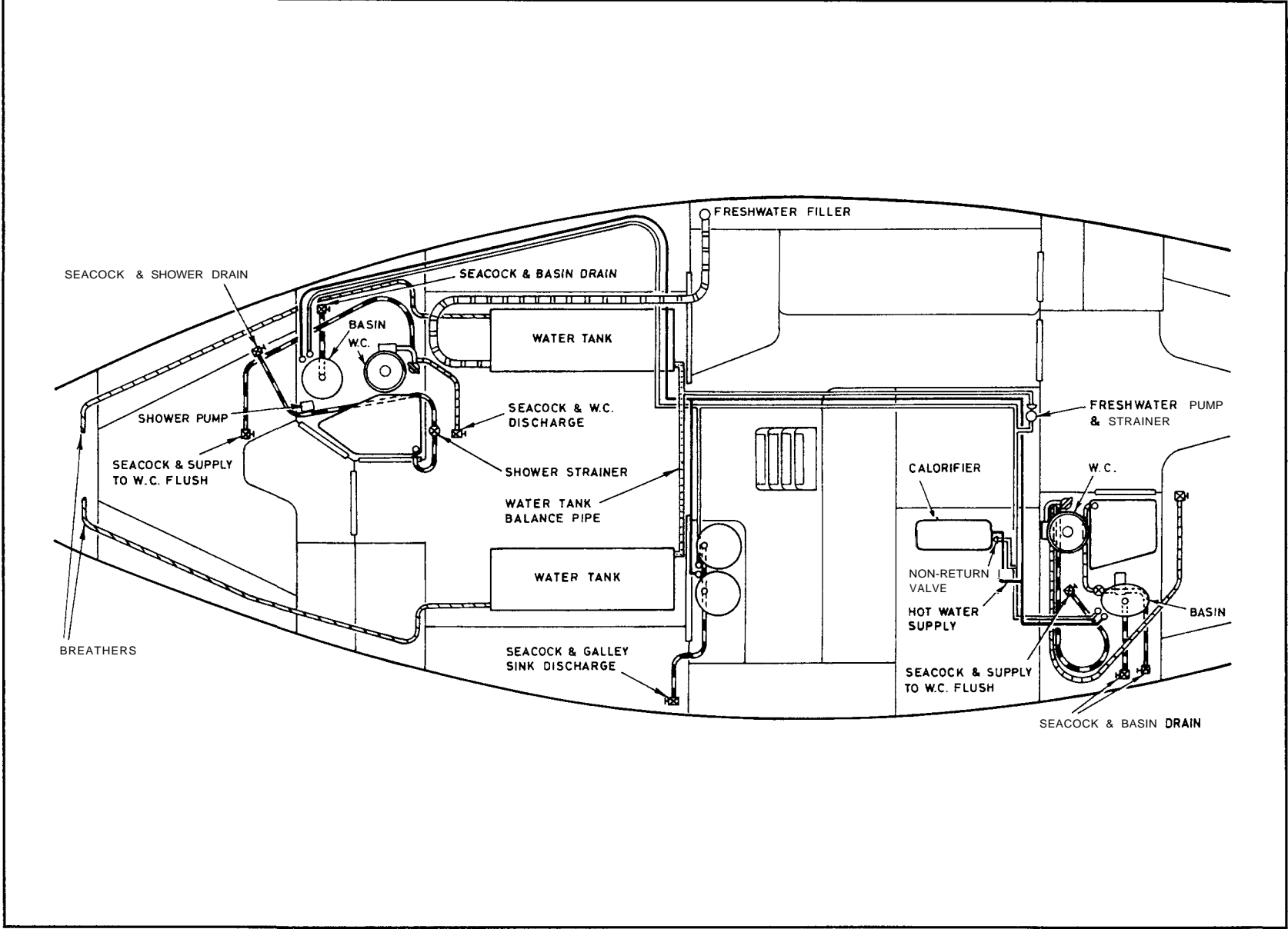
Motter



Moody 336 Freshwater System

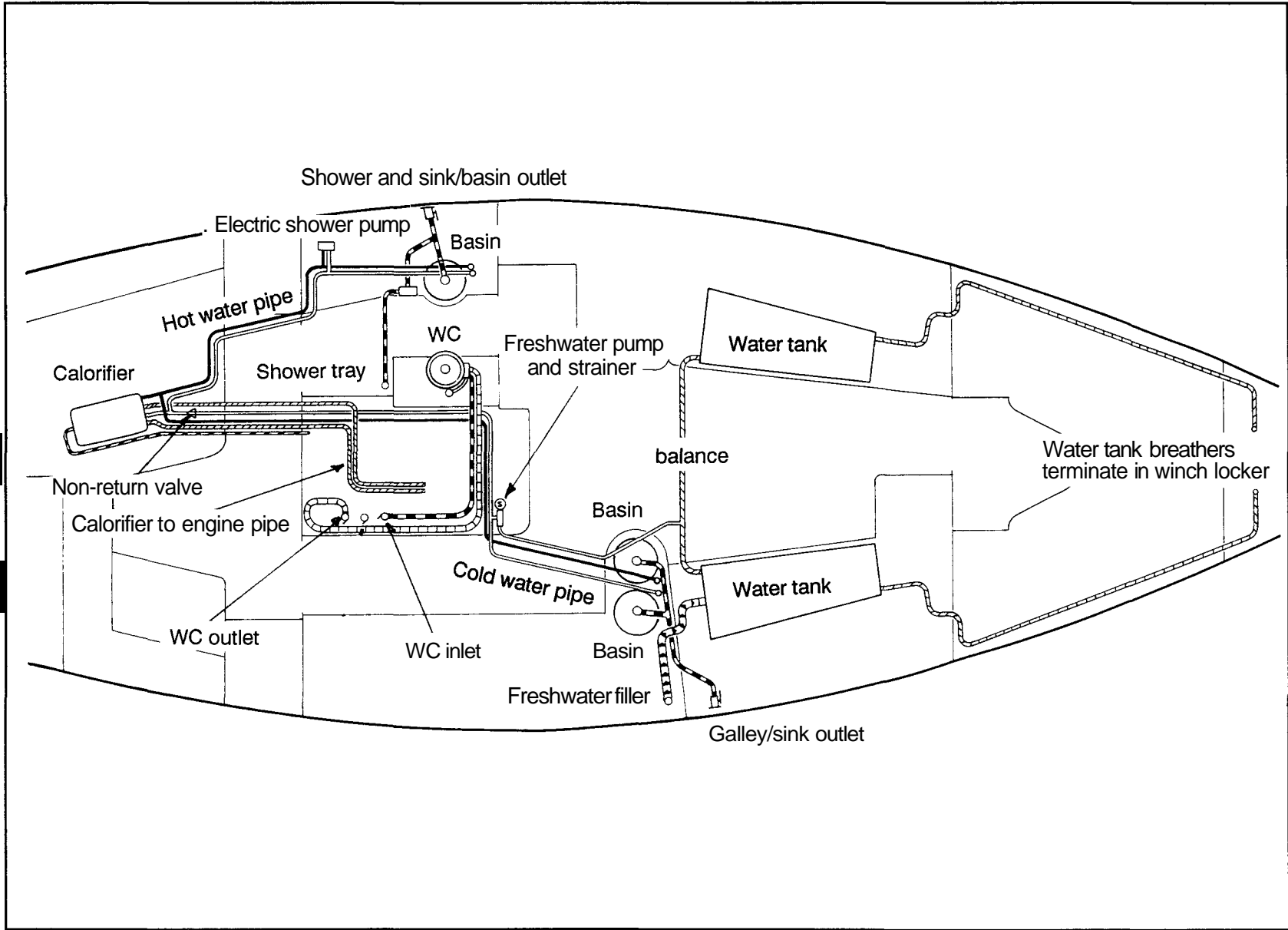
Moody 35 Water System

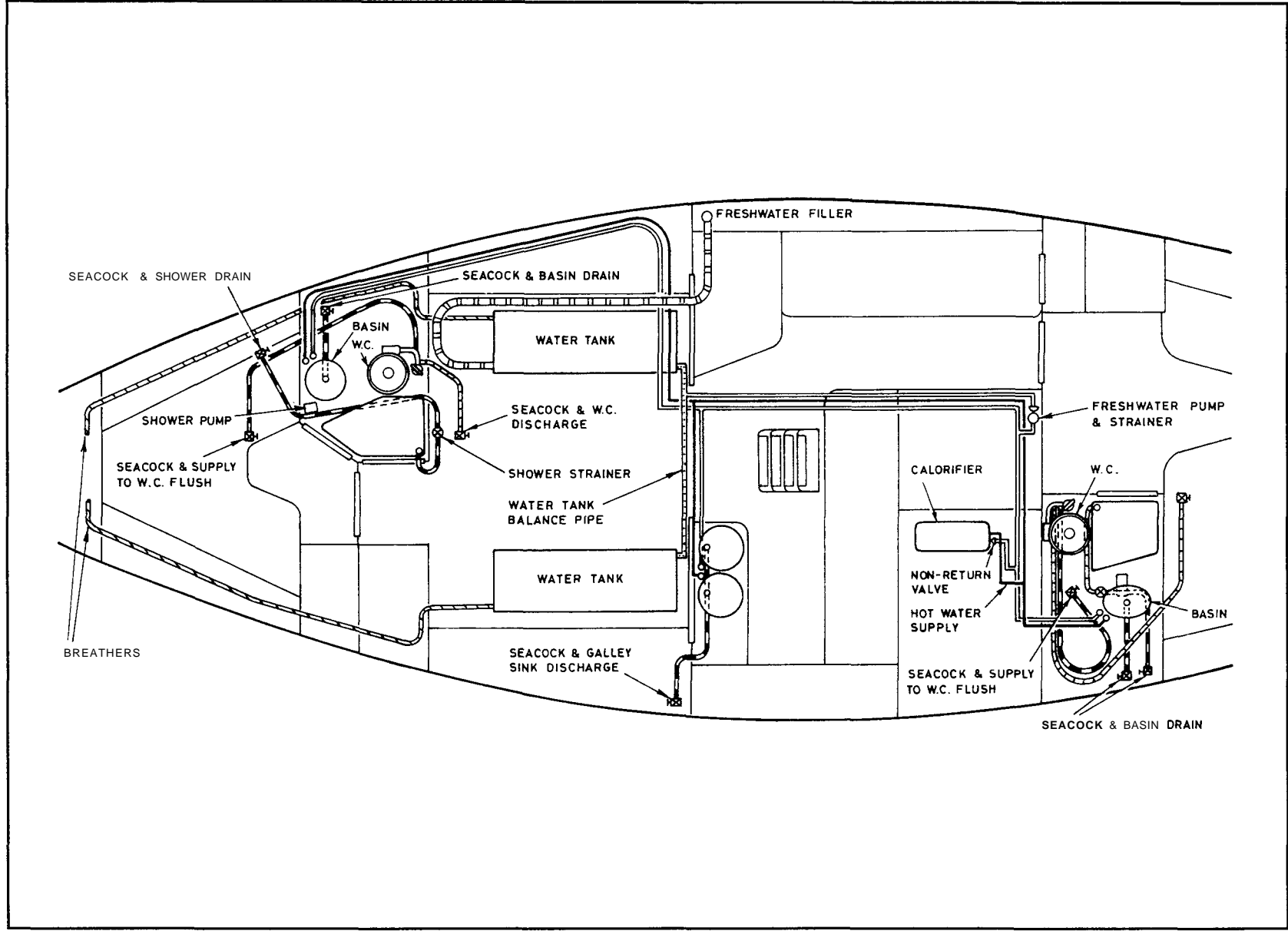




Moit 376 H ter System

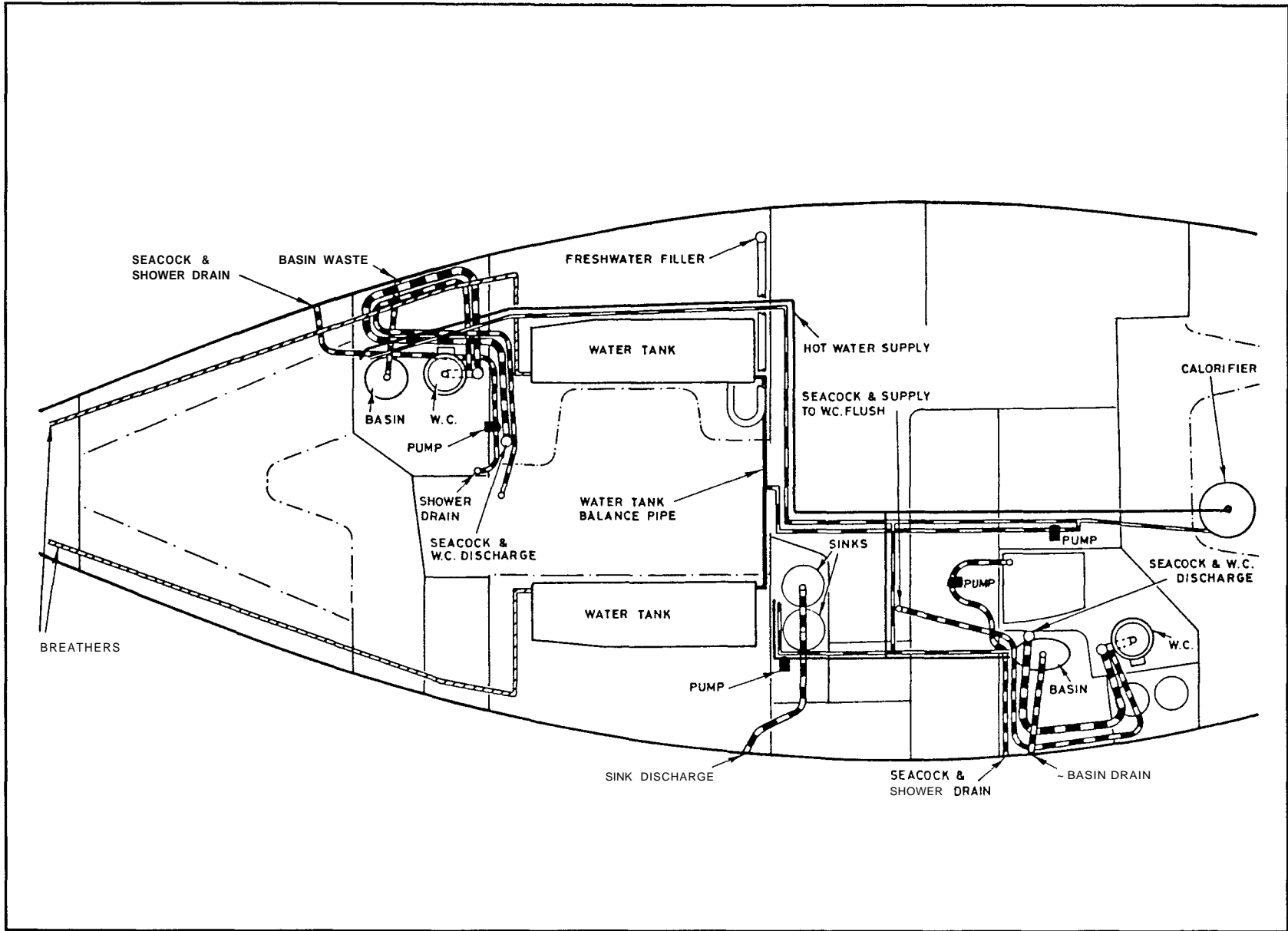
M 4 35  
Water m



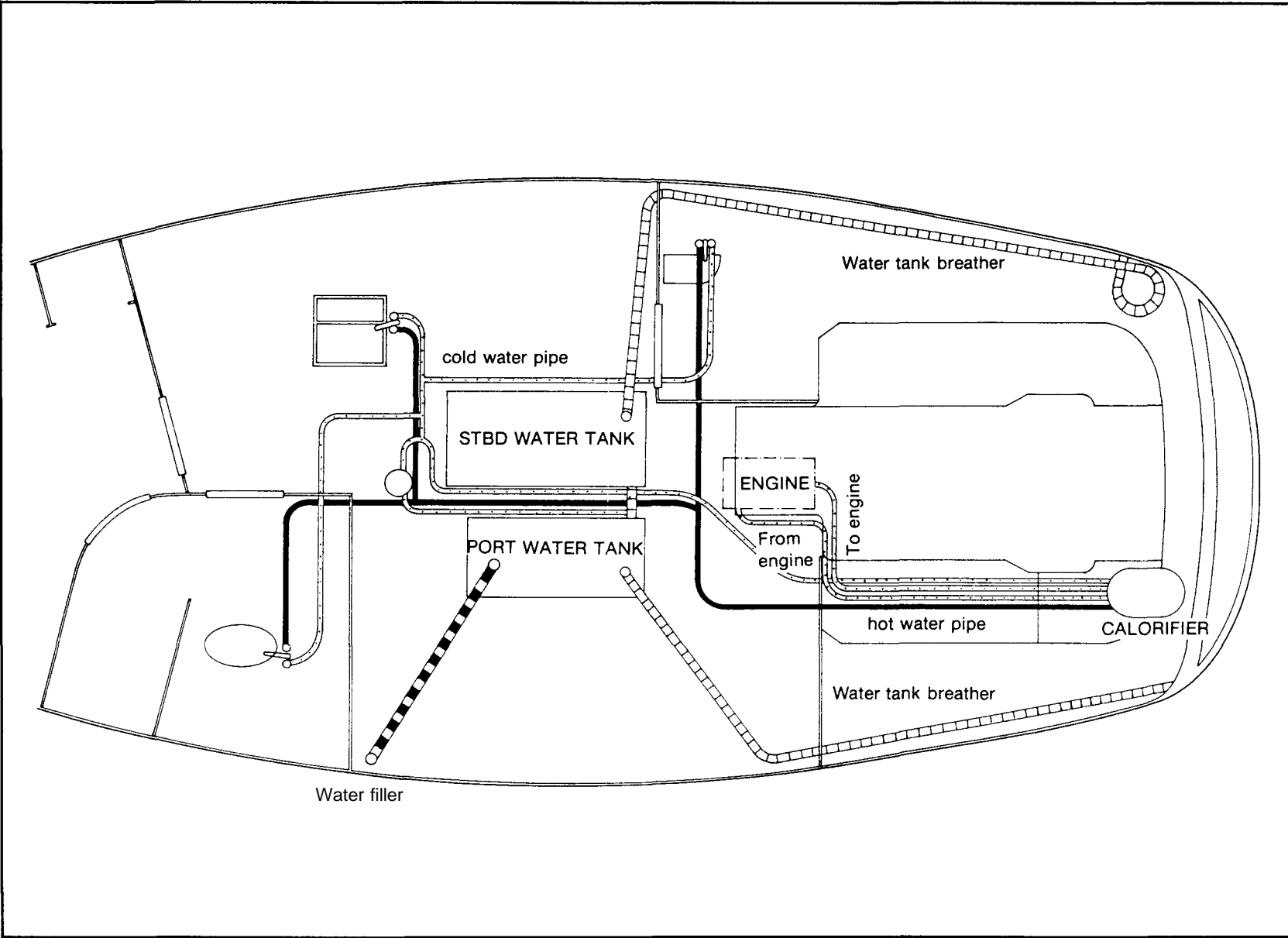


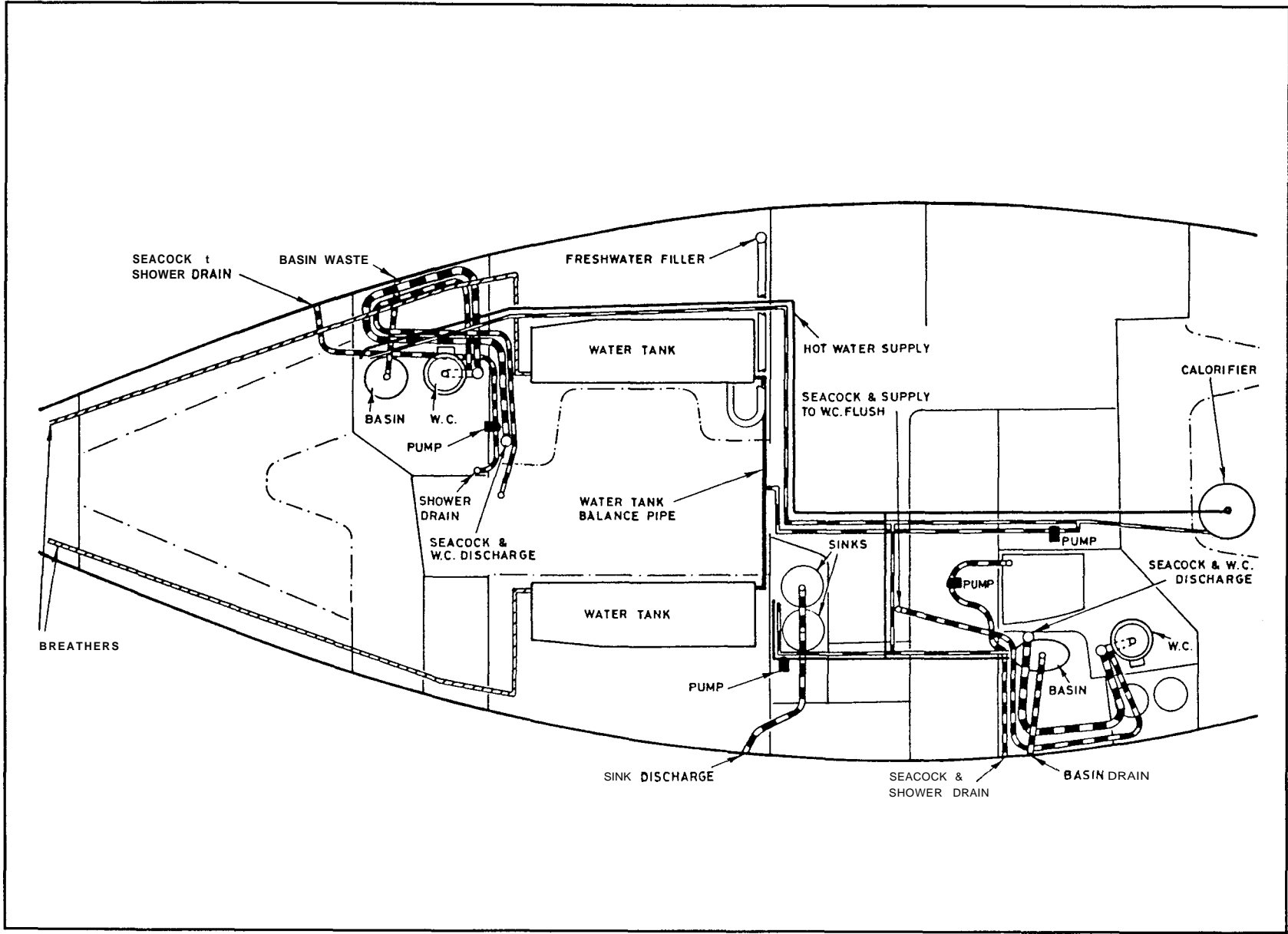
Mor 376  ter m



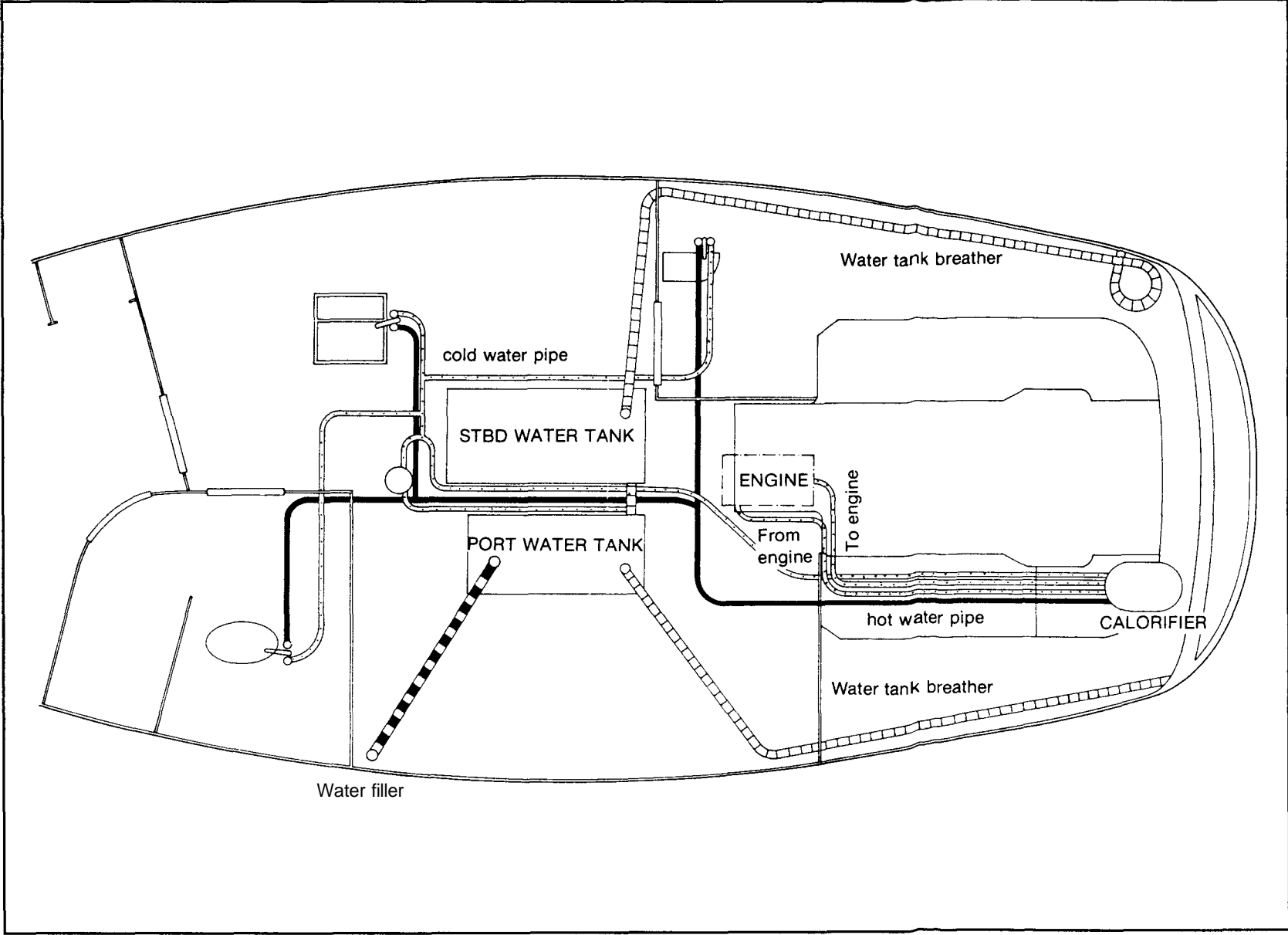


Moody 425  ter System





Mo 425 Fr ter System



*Eclipse 33 Fresh Water*

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### *Brydon toilet with holding tank*

Some export yachts are fitted with various types of holding tank system which provides various discharge combinations:

Dockside discharge ONLY  
Overboard discharge ONLY  
Dockside and Overboard discharge  
'Y' Valve discharge system

#### Operating Instructions

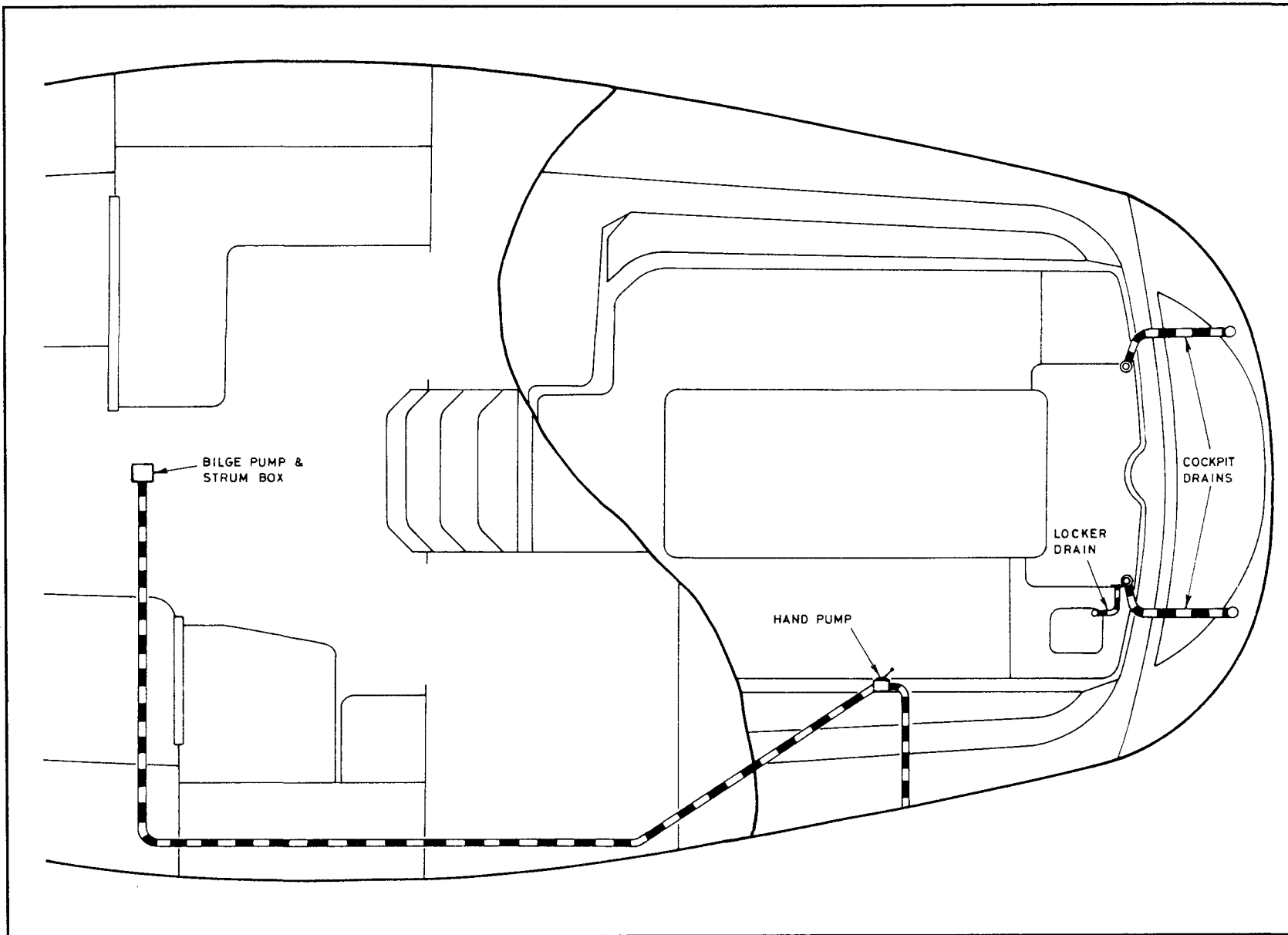
- 1 Open all outlet and inlet seacocks.
- 2 Discharge toilet into holding tank.

#### *Deck Discharge Only*

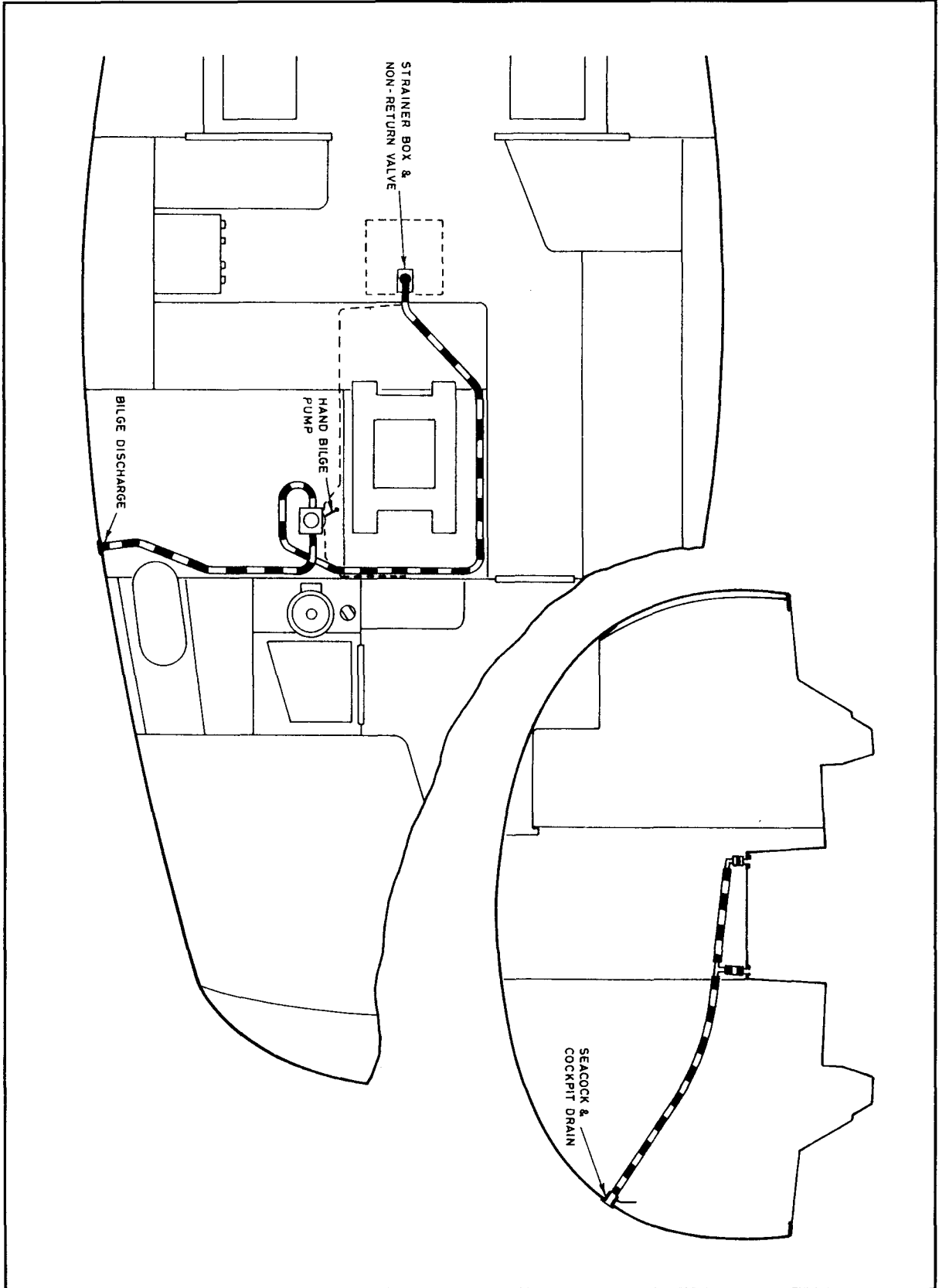
- 1 Connect discharge equipment to deck outlet.
- 2 Operate discharge equipment.
- 3 Remove discharge equipment.
- 4 Secure deck discharge outlet.

#### *Hull Discharge Only*

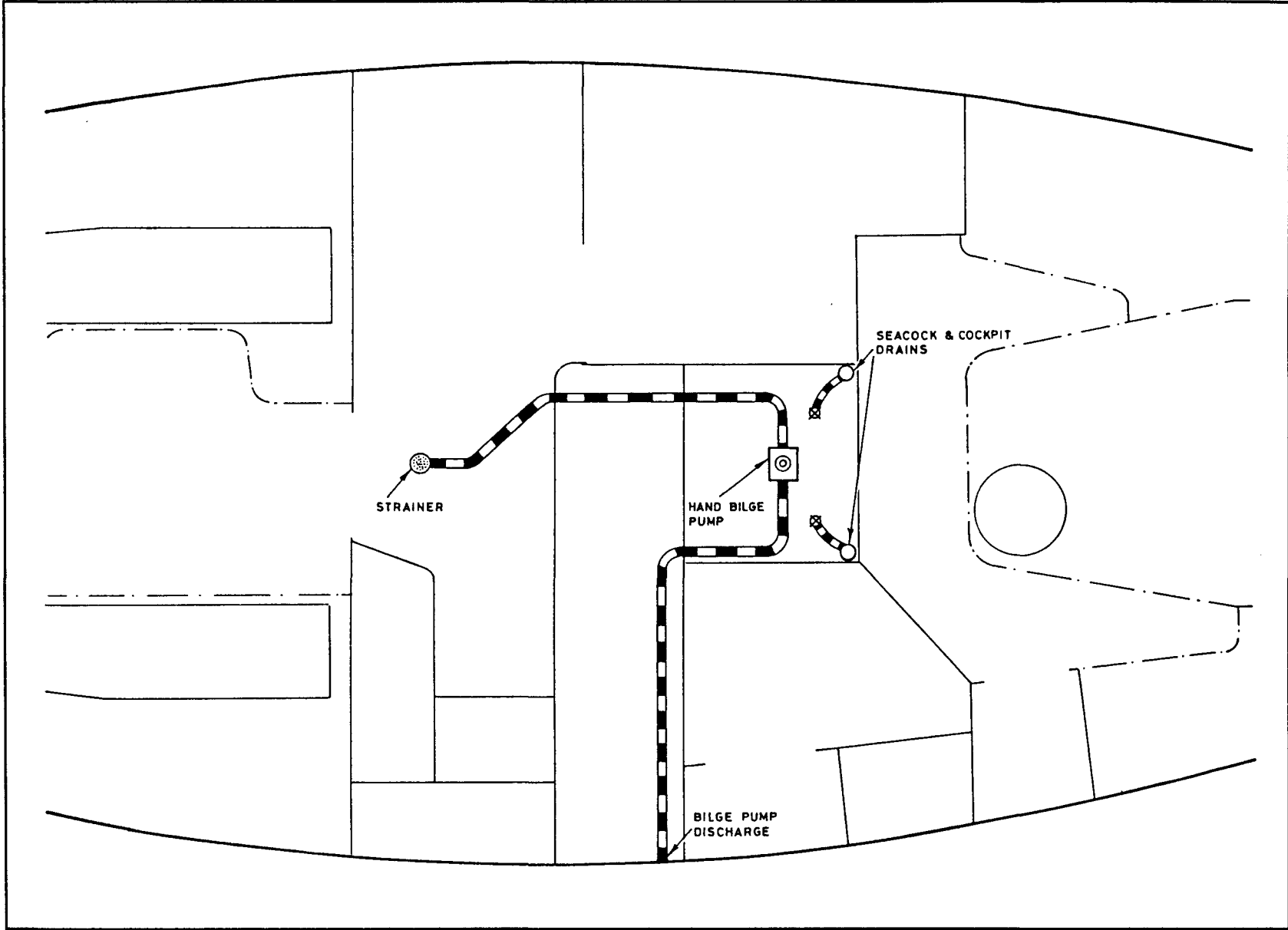
- 1 Pump out waste.
- 2 Close hull inlet seacock.
- 3 Close inlet seacock.



Mor<sup>31</sup> Waste

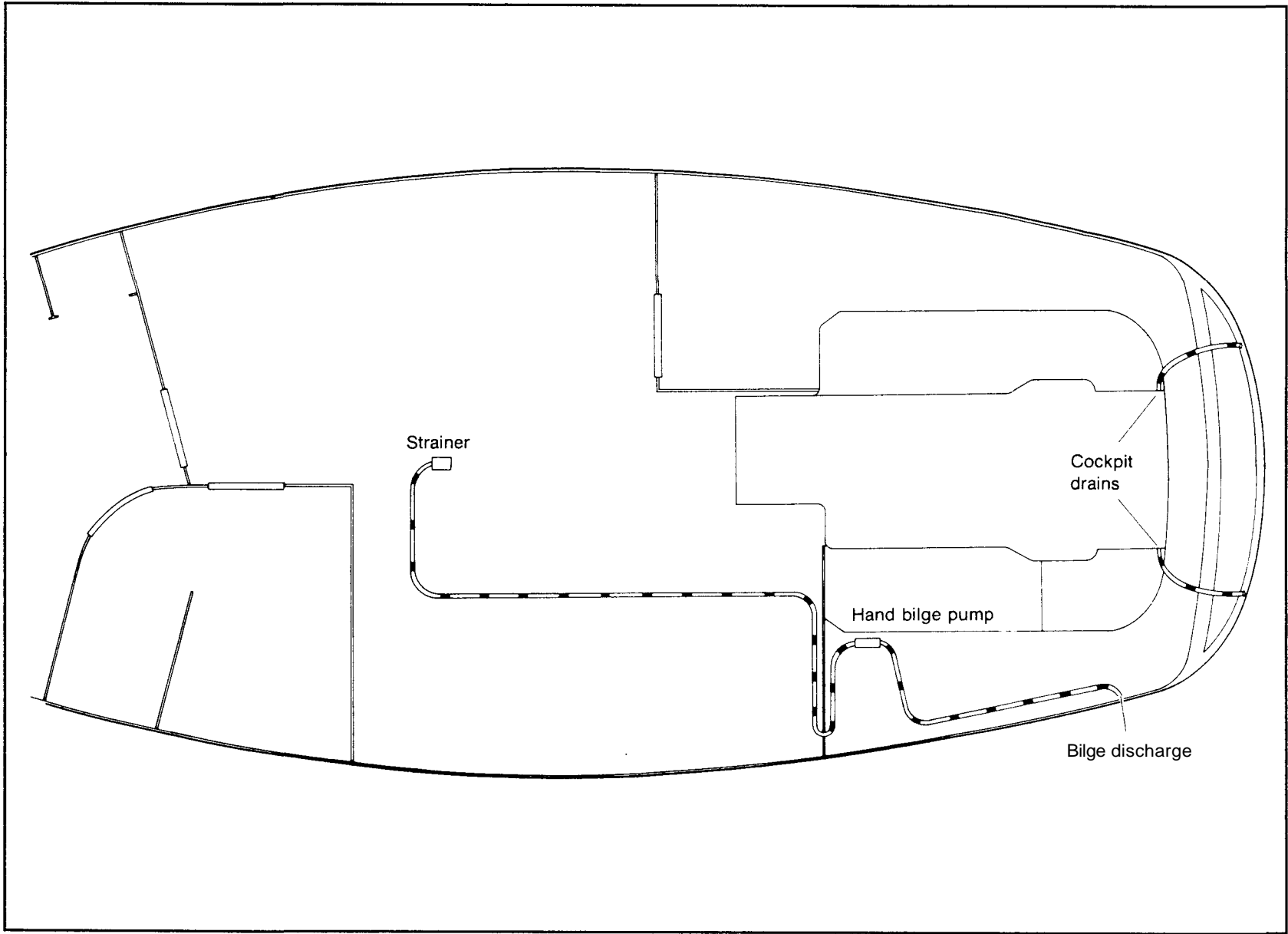


*Moody 376 Waste System*



Moody 425 Waste





Ecl 33 ste m

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*Water/waste equipment chart*

---

Yacht	Pressure system and hot water	Heads	Additional heads
Moody 31	No (foot pump in galley)	<b>Brydon</b> marine toilet, hand pump for basin	-
Moody 336	Yes	Brydon marine toilet, H&C supply to basin, seperate shower	-
Moody 35	Yes	Brydon marine toilet, H&C supply to basin, seperate shower	-
Moody 376	Yes	Brydon marine toilet, combined H&C supply to basin and shower	<b>Brydon</b> marine toilet, H&C supply to basin, shower optional
Moody 425	Yes	Brydon marine toilet, combined H&C supply to basin and shower	Brydon marine toilet, H&C supply to basin, seperate shower
Eclipse 33	Yes	Brydon marine toilet, combined H&C supply to basin and shower	H&C supply to basin
Eclipse 38	Yes	Brydon marine toilet, H&C supply to basin, seperate shower	Brydon marine toilet, H&C supply to basin, seperate shower
Eclipse 43	Yes	Brydon marine toilet, H&C supply to basin, seperate shower	<b>Brydon</b> marine toilet, H&C supply to basin, seperate shower

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## *Gas system*

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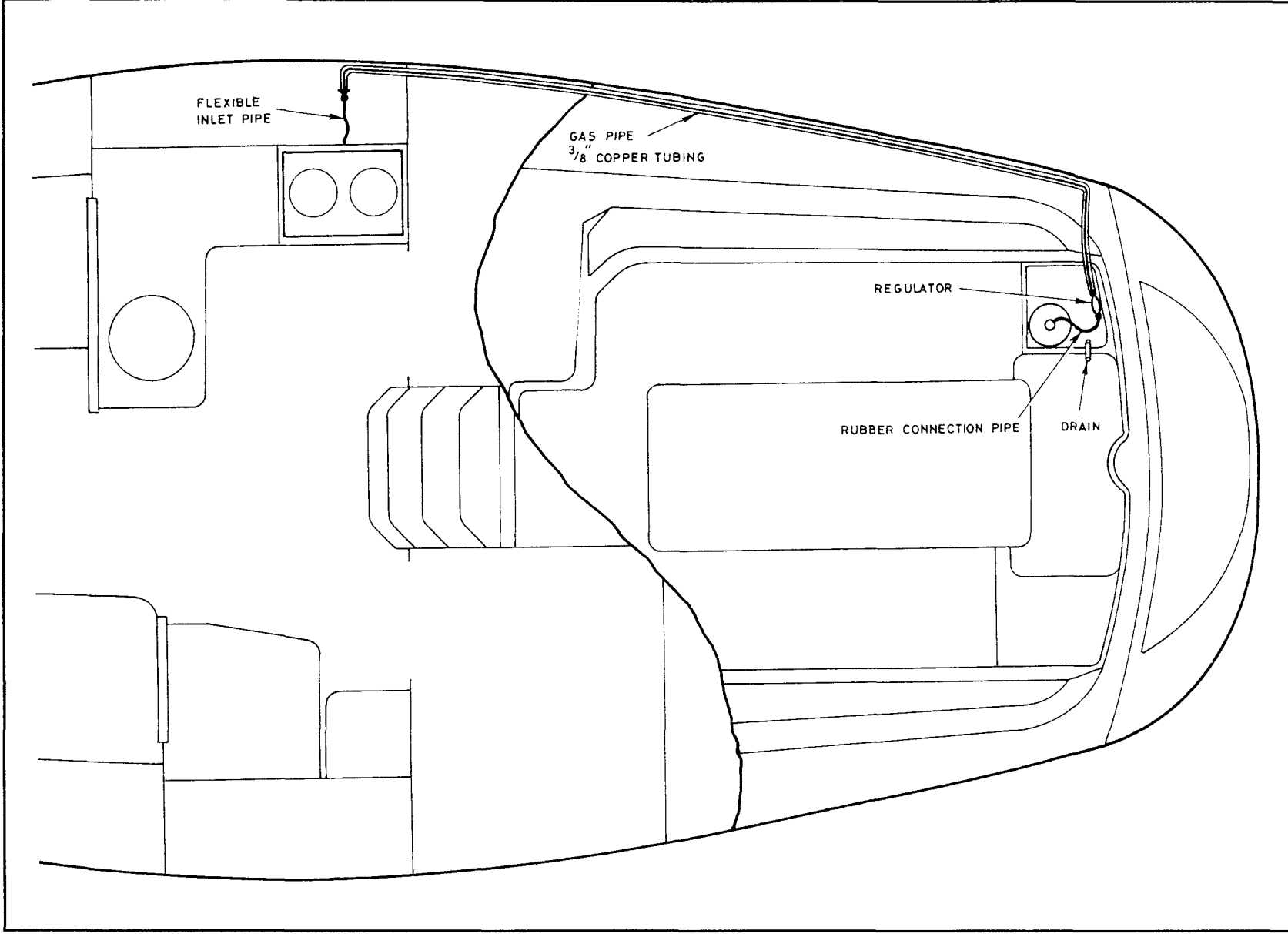
Stowage of the gas bottle(s) is in a remote self draining locker. A regulator is fitted on the bulkhead adjacent to the gas bottle(s) and connected via a short flexible hose to the gas bottle. The regulator reduces the gas pressure for the yacht's low pressure appliance(s). The supply to the cabin is via a 3/8" copper tube protected by a 3/4" clear plastic tube, glassed to the coaming to prevent movement. The copper pipe is terminated near the appliance. The appliance, normally a cooker, is connected to the gas pipe by a short flexible hose allowing it to move in its gimbals.

## *Leaks*

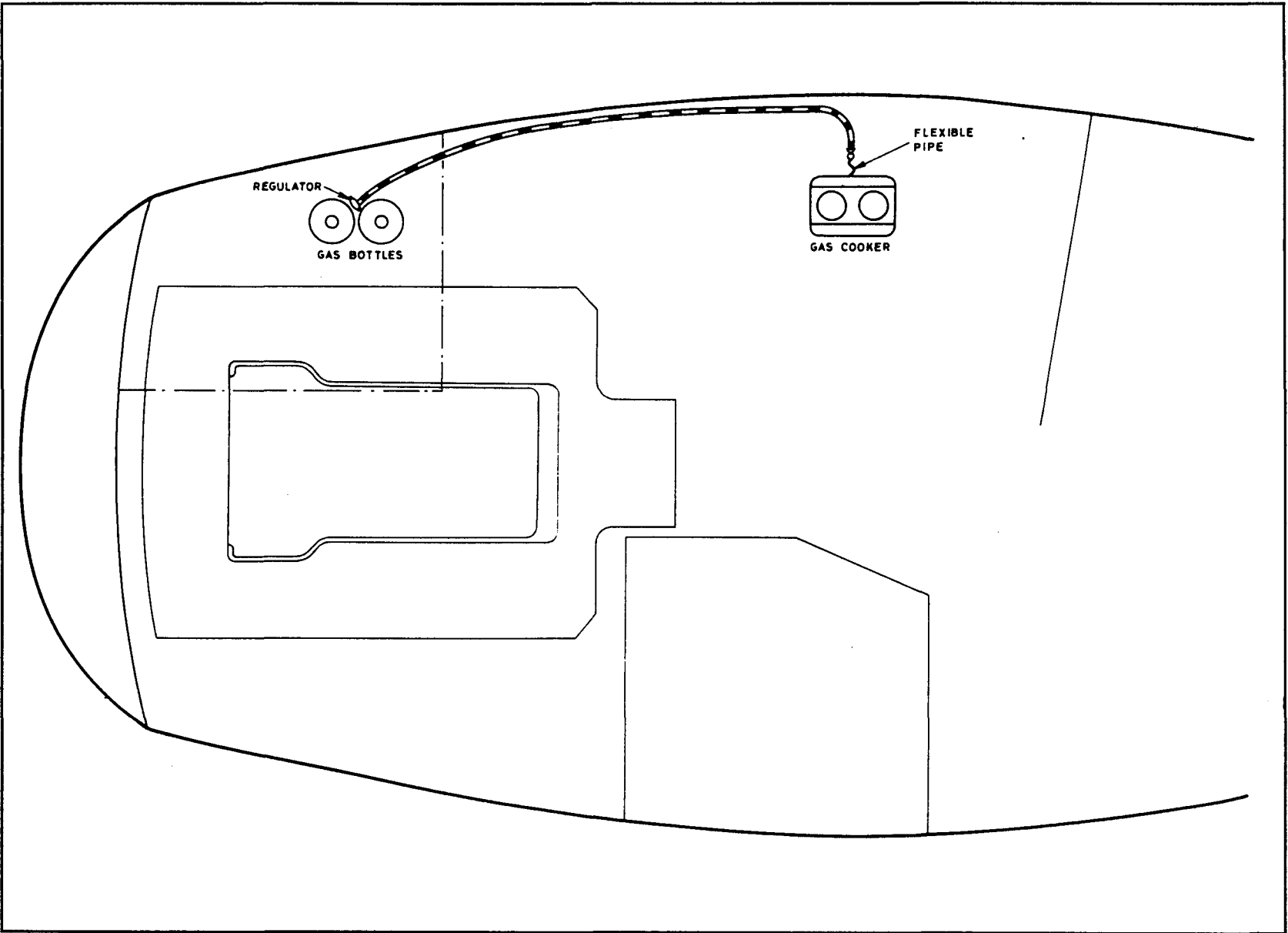
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Should you suspect that there is a leak in the system the following procedure should be carried out:-

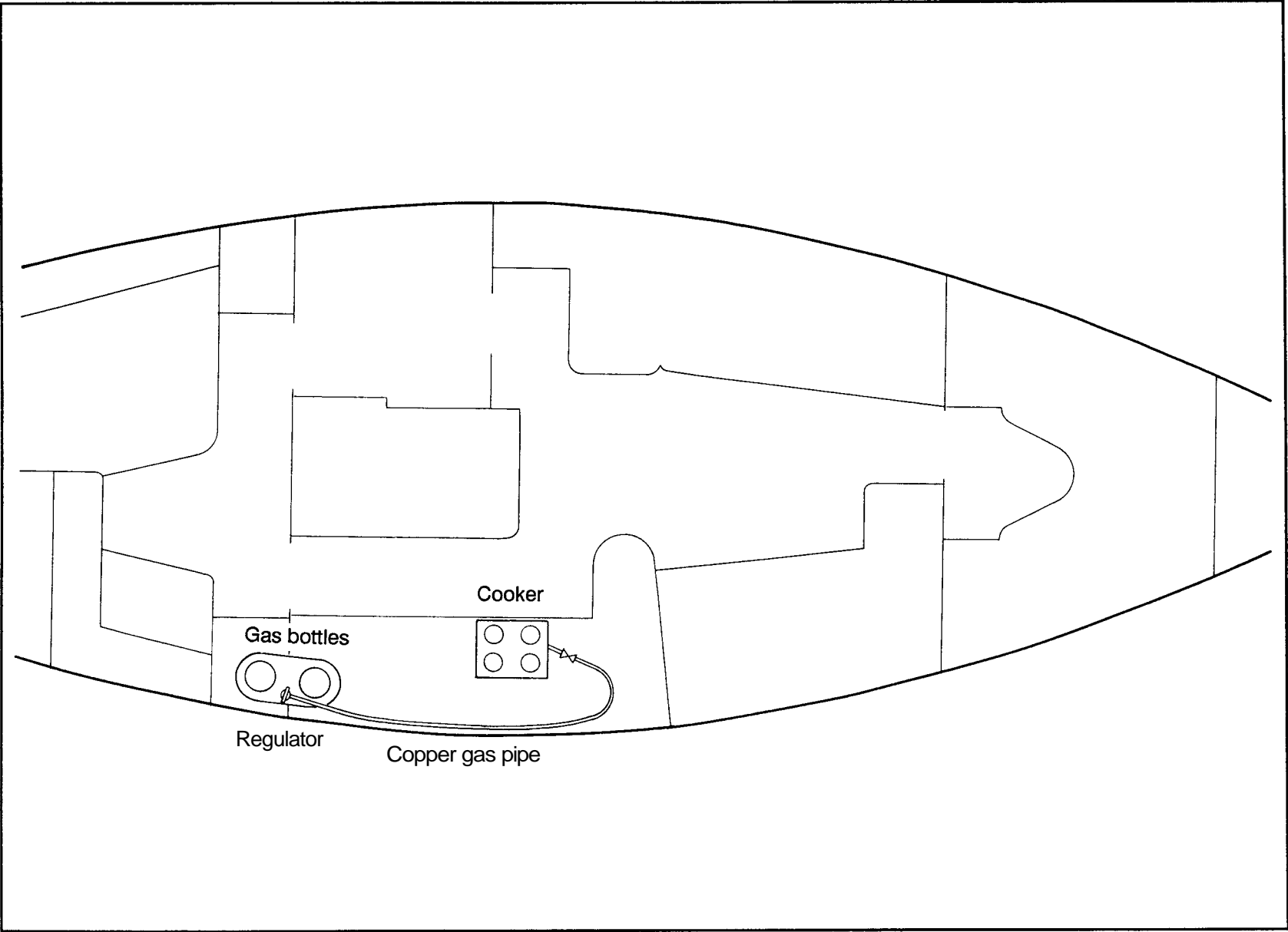
- 1 Ensure all naked flames are extinguished and electrics are turned off.
- 2 Turn gas supply off at source i.e. gas bottle.
- 3 Disconnect gas bottle.
- 4 Consult a qualified engineer.



*MoH 31 Gas System*

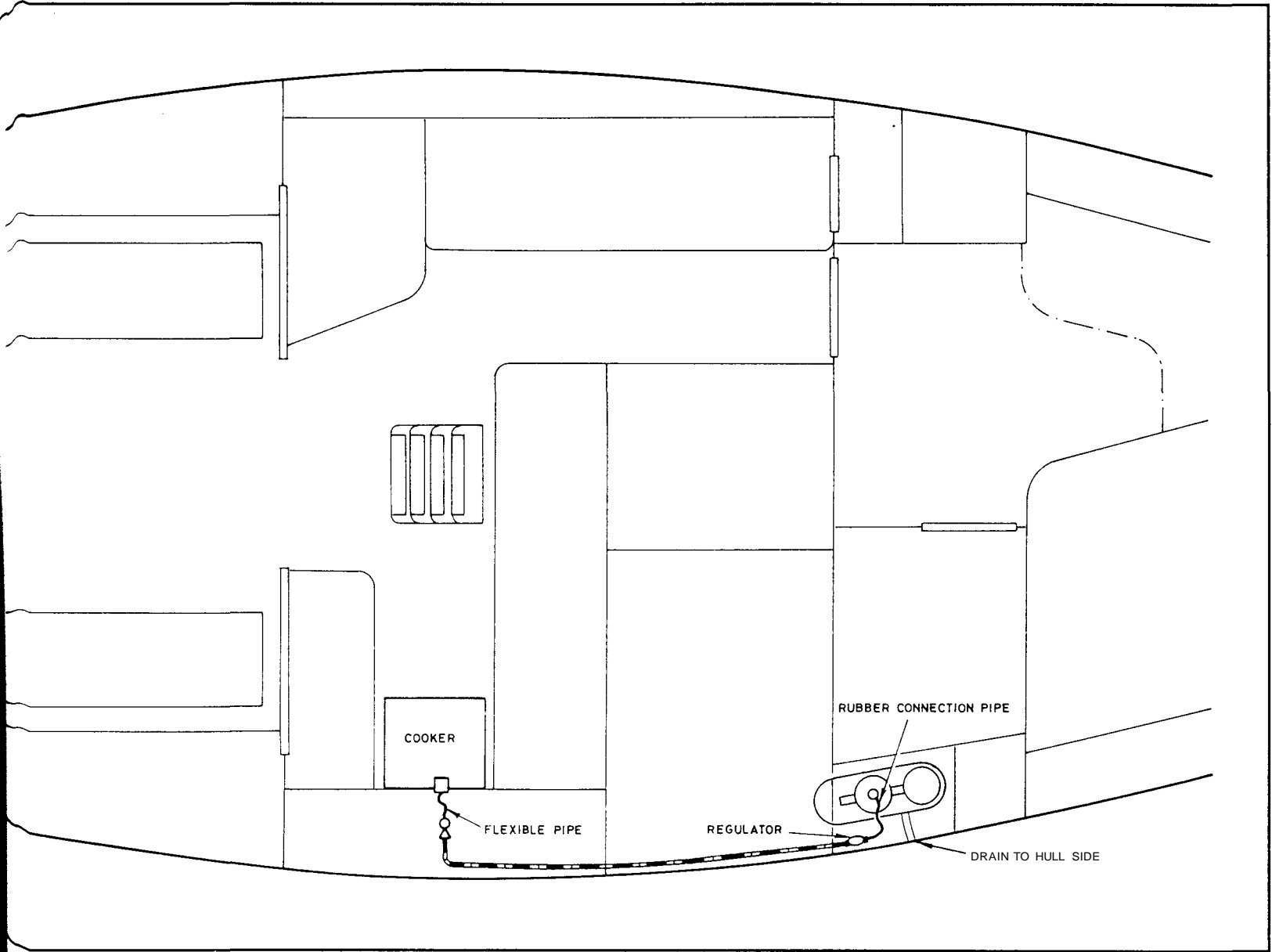


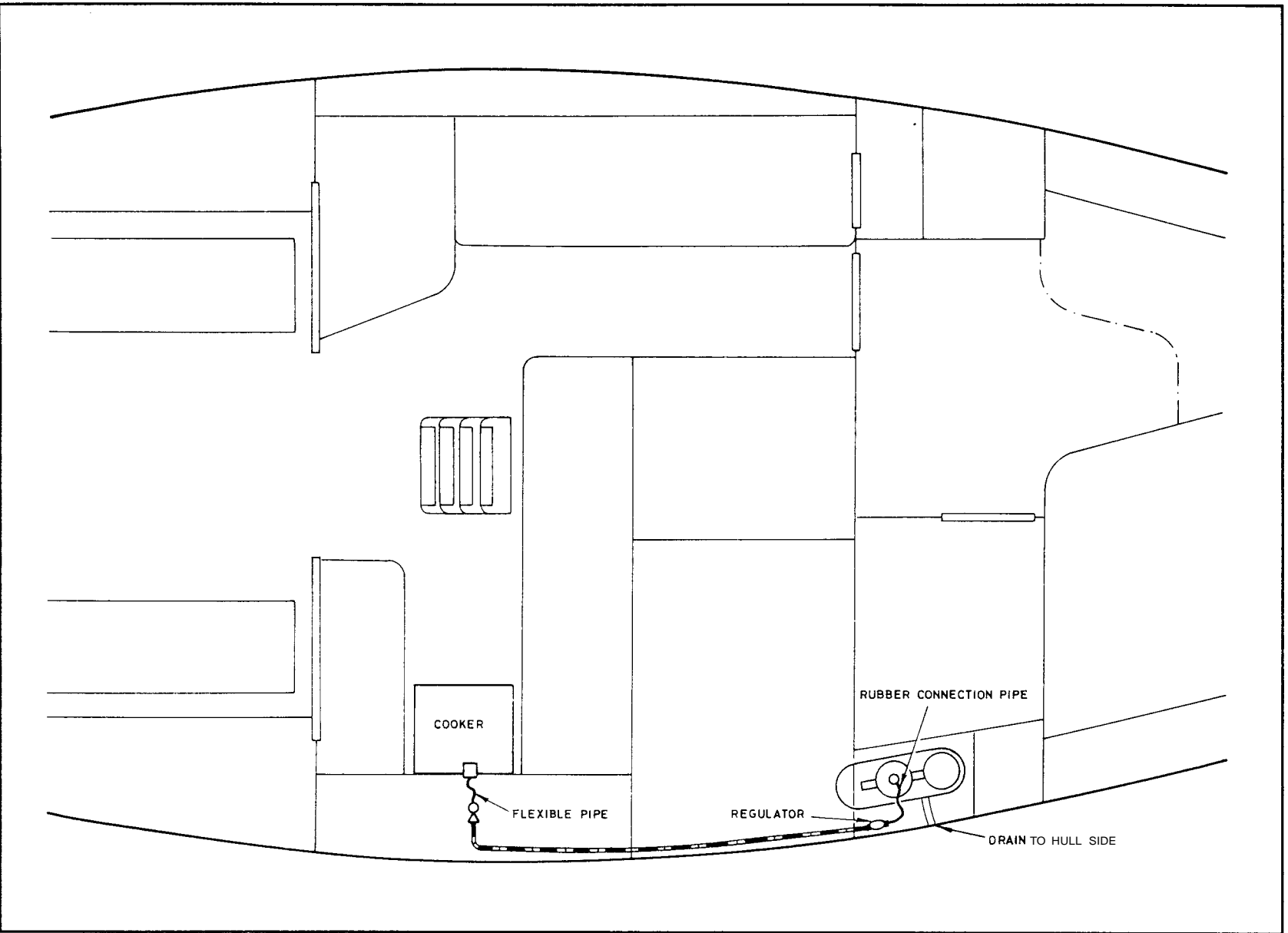
*Moody 336 Gas System*




*Moody 35 Gas System*

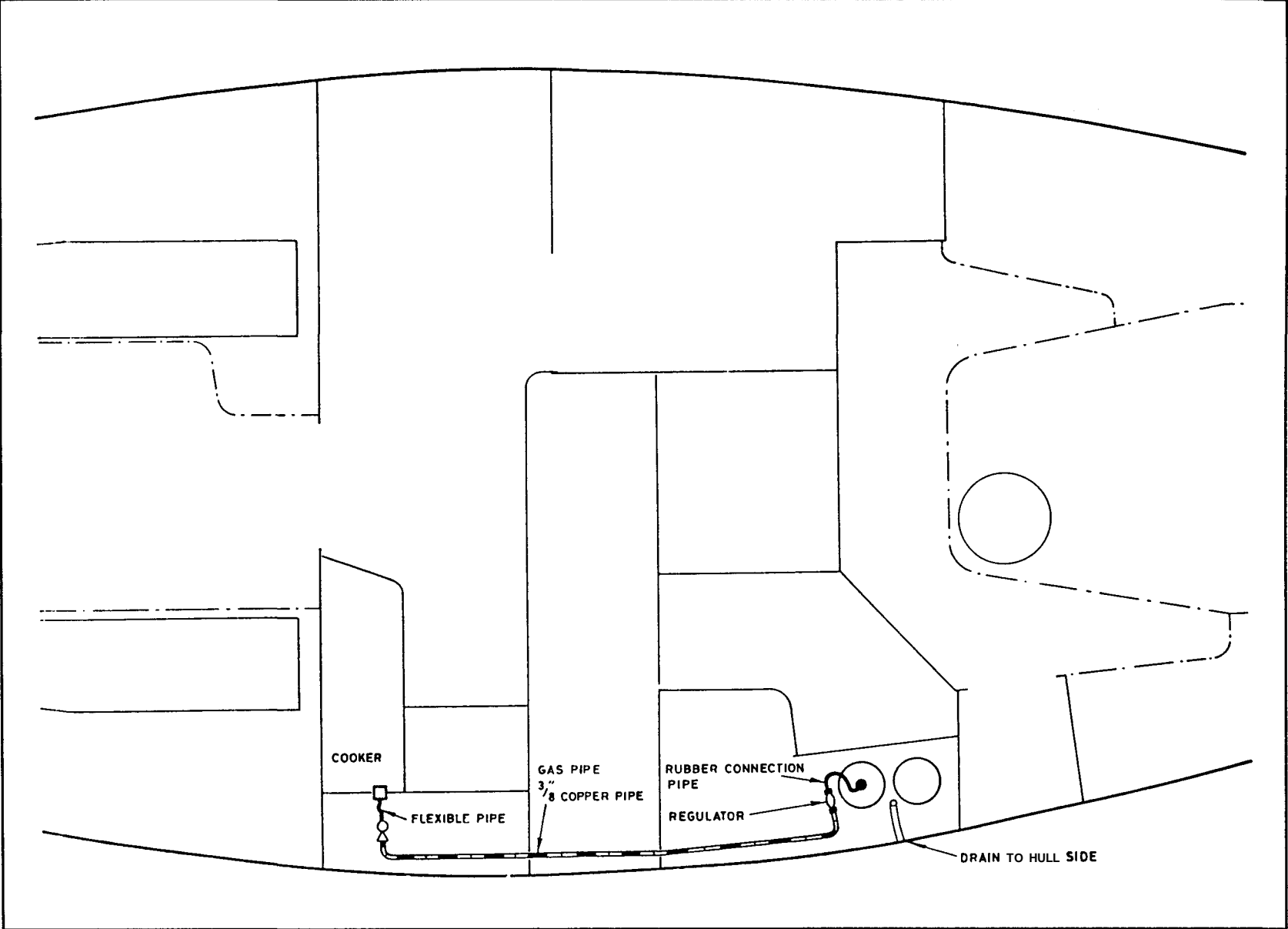
*Handwritten note:* WASH DOWN



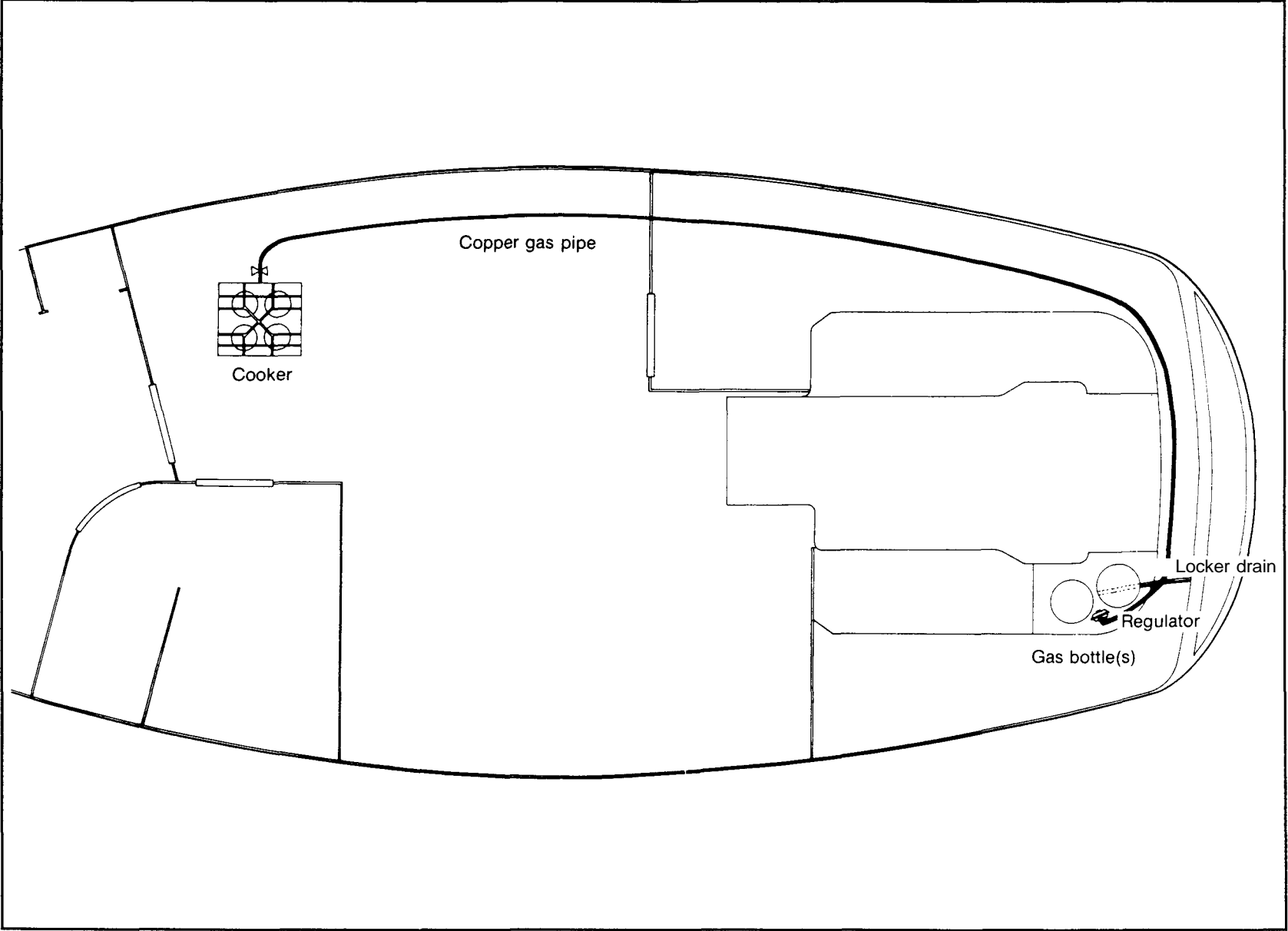


*Moody 376 Gas*  *em*

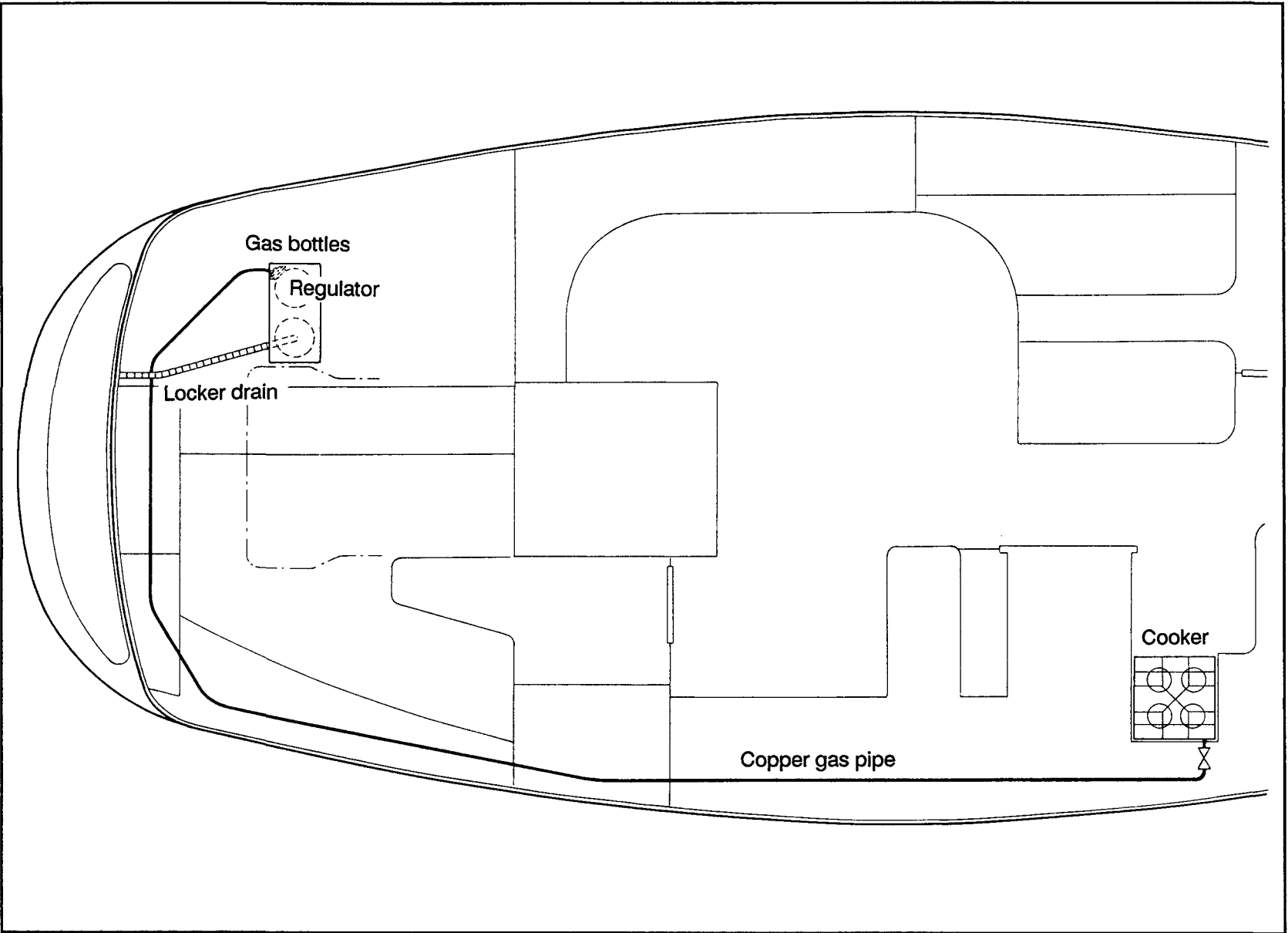




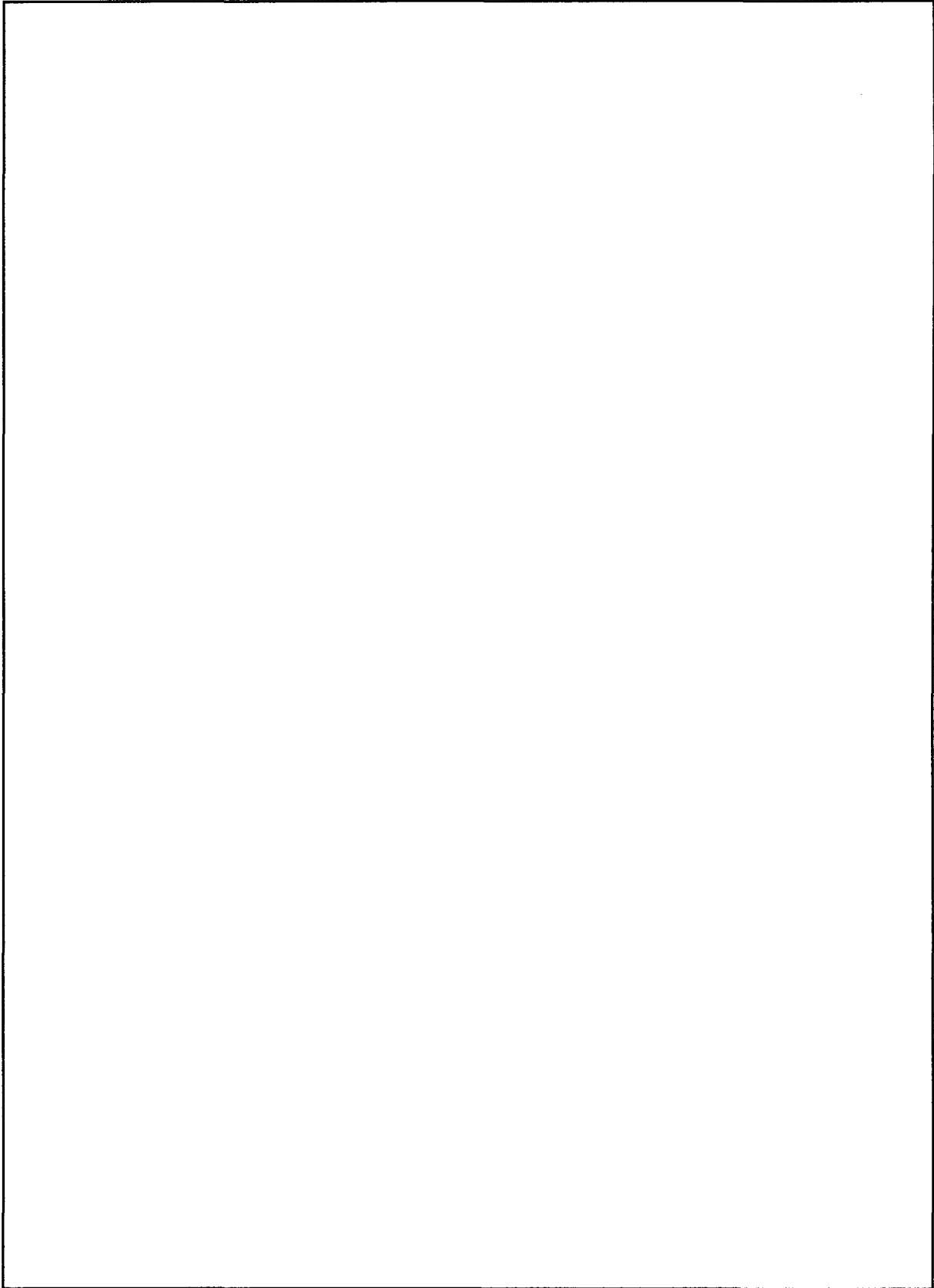
M 425 Gas m  
body



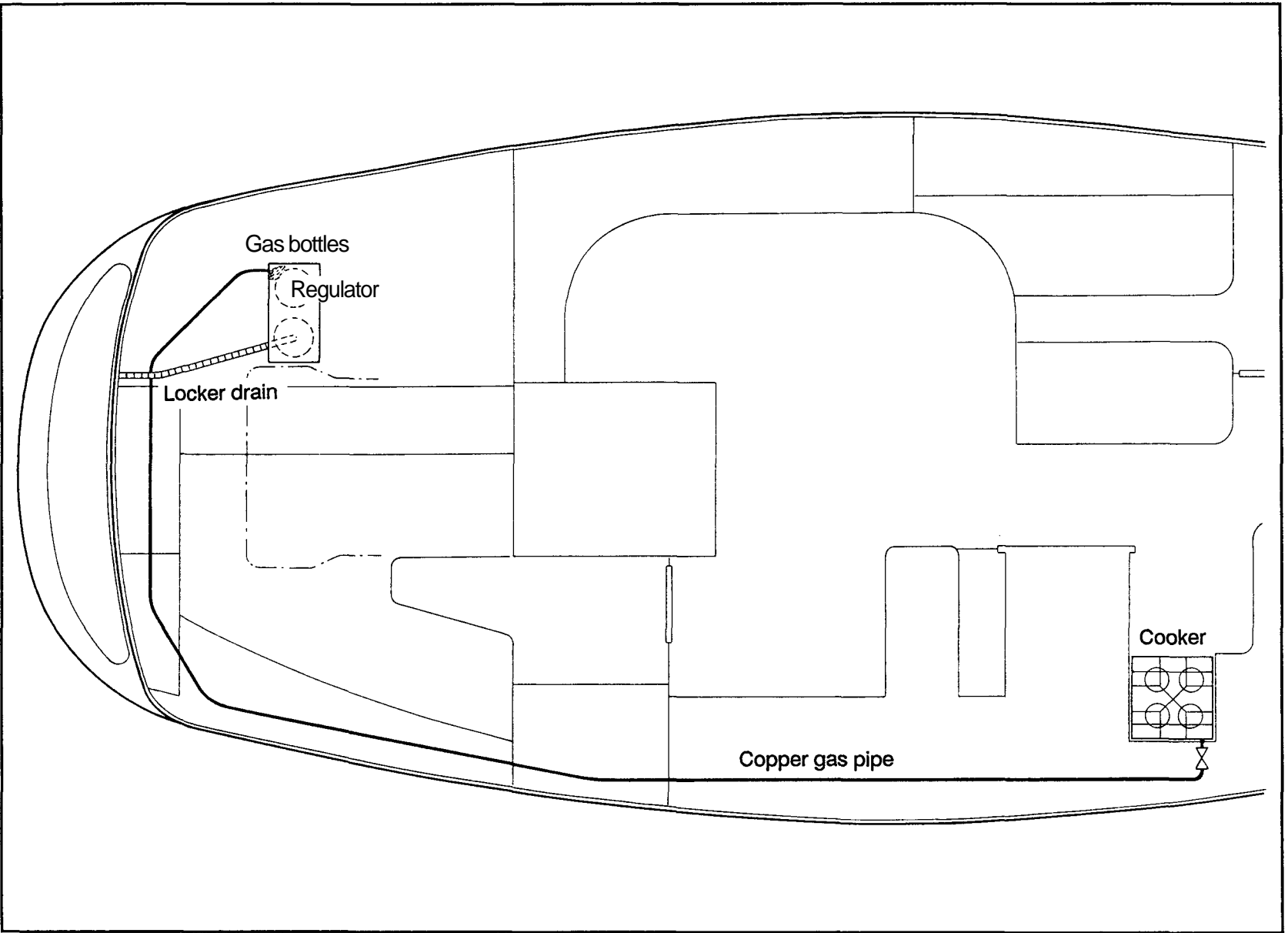
*Ecl. 33 Gas I*



*Eclipse 43 Gas* **m**



*Eclipse 38 Gas System*



*Eclipse 43 Gas System*

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## *Maintenance*

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### *Water/Waste Systems*

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#### *Brydon marine toilet*

Do not use any of the following products to clean Brydon marine toilets - antifreeze, acids, harsh alkalis, household bleach or abrasive pads.

After a long period of NON-USE, it is recommended that the inner surface of the pump cylinder is lightly coated with vaseline.

### *Gas Systems*

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If maintained correctly, gas systems are normally safe and trouble free. At the start of each season and before any long voyage, the following checks are recommended:

- 1 All rigid pipes for corrosion.
- 2 All rubber pipes for perishing.

**!** *It is recommended that all rubber hoses are replaced annually.*

- 3 Examine regulators for corrosion or damage. If in doubt take it to your nearest gas stockist.

**f** **WARNING: DO NOT ATTEMPT TO REPAIR A REGULATOR.**

- 4 All gas taps and controls tested for operation.
- 5 All fittings for corrosion and security.
- 6 Gas bottle lockers cleaned thoroughly and drains checked for blockages.

#### *Oven and hob unit*

Ensure that the oven and hob unit is checked at least once a year by a qualified technician.

#### *Other electrical items*

.See manufacturers instructions.

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# Maintenance tables

**!** Where this handbook differs from manufacturers literature, the advice given by the manufacturer should be taken.

## ***Prior to sailing (every 8hrs forengine)***

---

Equipment	Maintenance and Checks
Steering systems (Wire steering)	Check, using the manufacturers literature as necessary - wire tension, correct movement, rudder stops, cable and conduit for signs of wear and/or deterioration.
(Hydraulic steering)	Check for leaks and correct operation.
Engine systems	Check, coolant level, oil levels (engine and gearbox), oil pressure (gauge if fitted), oil pressure light for correct operation, alternator, water pump, drive belt condition, gear lever for correct operation. Lubricate stern gland by giving remote stern gland greaser a partial turn.
Water/waste systems	Check for leaks, security of fastenings, all components such as pumps in accordance with manufacturers literature. Check marine toilets for leaks, security of fastenings (REPAIR LEAKS IMMEDIATELY). Refer to manufacturers literature.
Gas Systems	Check complete system for security and leaks.

## ***Weekly (every 40hrs forengine)***

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Equipment	Maintenance and checks
Engine	Check, water inlet strainer and diesel water trap.
Batteries	Check, electrolyte level and battery terminals for security and freedom from corrosion.

## ***Two monthly (every 100hrs forengine)***

---

Equipment	Maintenance and checks
Engine systems	Renew, lubricating oil and filter, clean air filter. Check, drive belt for wear and correct tension, for water in fuel (drain water trap if necessary), engine for oil and water leaks, idling speed is correct.
Water/waste systems	Check shower filters are clean and free from obstructions.

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## *Annually (every 400hrs for engine)*

Equipment	Maintenance and checks
Sails and rigging	Refer to 'Hints and advice on rigging and tuning your kemp mast' - autumn overhaul.
(Running rigging)	Check thoroughly.
(Standing rigging)	Remove and examine thoroughly.
(Rigging screws)	Check and grease threads.
(mast/boom)	Check mast, boom and spinnaker pole(s) for wear, corrosion, etc. Clean and rinse with freshwater.
(ropes)	Check for wear, damage, etc.
(sails)	Check for <b>wear</b> , damage, etc.
(reefing system)	Clean and rinse with freshwater. Lubricate all moving parts.
Fittings	Smear all aluminium fittings and <b>anodised</b> surfaces with wax polish.
Winches and windlasses	Check for security, wear, corrosion and correct operation. Lubricate in accordance with <b>manufacturers</b> literature.
Ground tackle	Check all anchors and ground tackle for security and serviceability. Lightly grease all shackles.
<b>Cathodic</b> protection	Check sacrificial anode for erosion and all bonding cables for security and condition.
Bilges	Check limber holes are free from obstruction.
Steering systems (wire steering)	Strip and clean completely, lubricate all moving parts in accordance with the manufacturers literature. Check wires for signs of wear and deterioration.
Engine systems	Renew fuel filters, drain and clean fuel tanks. Check and adjust valve clearances, gearbox lubricating oil and cooler water box, water inlet strainer, service injectors, inspect engine mounts and bolts for security and signs of wear, damage or deterioration, engine alignment is correct, all controls for security and serviceability, all fuel, oil and coolant pipes are secure and free leaks. Lightly smear fuel filler cap thread with vaseline to prevent the ingress of water and assist <b>usage</b> .
Water /waste systems	Lightly smear freshwater filler cap thread with vaseline to prevent the ingress of water and assist usage. Check correct operation of water pressure pump cut-out (refer to manufacturers literature as necessary).
Gas system	Check gas bottles for signs of corrosion. Examine regulator for corrosion and damage. If in doubt, have it checked by a qualified engineer. Renew all flexible hoses. Test all gas taps and controls for safe operation. Ensure that the gas bottle locker is clean and that all drain holes are free from blockages.
Electrical system	Check all exposed plugs, sockets and connections for security and corrosion. Lightly smear with a <b>Silicone</b> grease.
Electronics	Check for security of mounting, free from corrosion and correct operation.
Safety equipment	Examine all safety equipment for serviceability. Where the equipment has a finite life, check that it is not out of date. If unsure as to the condition of any safety equipment, have it checked professionally.



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*Six yearly (every 2400hrs for engine)*

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Equipment	Maintenance and checks
Engine systems	Check all ancillary equipment such as starter motors, water pumps, alternators, etc.

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# *Laying-up*

## *Laying-up checklist*

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Marine Projects (Plymouth) Ltd recommend that Moody yachts are lifted ashore for the winter period to reduce the possibility of water absorption by the GRP hull. GRP will absorb a certain amount of moisture and in certain circumstances, prolonged immersion can increase the incidence of osmosis.

### *A list of reminders for laying-up in winter:*

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- 1 If hauled out and propped up check:  
Security of props, shores and wedges or security in cradle.  
Is it safe against likely wind directions and vandals?
- 2 Check insurance covers laid up period; keep insurance company informed.
- 3 Ensure adequate ventilation while leaving boat and secure against forced entry or storm.
- 4 Consider possibility of heating during periods of extreme cold.
- 5 Remove cushions for cleaning and storage.
- 6 Lift saloon carpets, clean and store.
- 7 Leave lid of ice box and fridge door open (where fitted).
- 8 Open all lockers and cabin doors. Hatches should be propped open to ensure free air movement.
- 9 Take home everything likely to get rusty pots, pans, etc. Remove plastic crockery for cleaning.
- 10** Blow through all water pipes to prevent freezing. Clean tanks, drain calorifier.
- 11** Remove batteries for cleaning, charging and storage.
- 12** Plan engine and stern gear maintenance such as renewing stern gland packing, cutlass bearings etc.

- 
- 13 Take sails ashore for cleaning and valet. Note particular areas you wish sailmaker to check.
  - 14 Plan sail modifications - recutting or replacement is normally cheaper out of season.
  - 15 Store sails ashore in the dry after work completed.
  - 16 If possible cover the deck, coach roof and deck joinery to reduce cleaning effort on recommissioning. Make sure cover is supported clear of woodwork to prevent chafing. Ensure cover is securely fastened.
  - 17 Clean all running rigging, check for replacements.
  - 18 Check all standing rigging. Replace rigging screws, shackles and terminals if there are signs of excessive wear.
  - 19 Check mast fittings - tracks, sheaves, blocks, spreader sockets, etc.
  - 20 Remove old or loose antifouling, apply new coating.
  - 21 Check all varnish and repair as necessary.

### ***Procedure for engines***

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The following winterisation procedures should be carried out on all yachts when laid up.

- 1 Run engine with coolant water mixed with antifreeze. Stop engine and drain completely. This must be carried out afloat. If carried out ashore, the vibration may cause damage.
- 2 Where engine are head exchanger cooled, antifreeze should be added to closed circuit system to manufacturer's recommendation. On yachts destined for shipment, water should be drained off.
- 3 Disconnect exhaust tubing from engine. Tape over exhaust outlet on engine.
- 4 Remove air cleaner, tape up air inlet on engine and inlet and outlet ports on air cleaner itself, store air cleaner.
- 5 Remove impeller(s) from coolant water circulating pump and tie to pump to which they apply for easy location when commissioning.
- 6 Drain lubrication oil from engine, fill with inhibiting oil.
- 7 Completely fill fuel tank. This reduces the possibility of corrosion from condensation.

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## *Electrics & general*

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- 1 Disconnect yacht's batteries and pull battery cables well clear of terminals. Remove batteries.
- 2 Spray exposed electrics and wiring terminations with WD40 (or similar), pay particular attention to battery master switch.
- 3 Ensure batteries are moved from items of equipment such as echo-sounders, radios, logs, etc.
- 4 Remove and store compass.
- 5 Remove and store sprayhoods (as sails).
- 6 Completely dry out toilet installation after testing. Ensure that the lever is in the 'DRY BOWL' position and that the drain plug from the base of the toilet is removed. If in salt water areas, flushing with fresh water is recommended.
- 7 Ensure domestic fresh water system is drained. Water tanks should be dried out where possible. The non-return valve on the outlet side of the calorifier must be removed to allow it to be drained. Refit valve after draining.

## *Recommissioning*

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### *Cooling system*

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(Sea Water) Close drain taps, open sea water inlet valve.  
(Fresh Water) Fill cooling system with coolant.

### *Lubricating system*

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Drain inhibiting oil, replenish sump with lubricating oil.

### *Fuel system*

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Bleed fuel lines as necessary.

### *Exhaust system*

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Remove tape blanks and reconnect exhaust hose.

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***Electrical***

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Recharge batteries, refit and reconnect.

***Airfilters***

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Remove tape blanks and reconnect air filters.

# *Specifications*

Yacht	Length overall (M)	Length over waterline (M)	Beam (M)	Draft (M)	Height waterline to M/H (M)	Displacement (Kgs)	Ballast (Kgs)
Moody 31	9.37	7.75	3.2	1.52 fin 1.12 bilge	1.30	4530	1667
Moody 336	10.21	8.76	3.54	1.68 fin	14.17	5720	1809
Moody 35	10.52	8.78	3.62	1.60 fin 1.17 bilge	14.10	5798 fin 6025 bilge	2152 fin 2378 bilge
Moody 376	11.53	9.53	3.81	1.68 fin 1.37 scheel 1.22 lifting	15.78	7820	2950
Moody 425	12.75	10.44	4.07	1.83 fin 1.42 scheel	17.3	9628	3811
Eclipse 33	9.91	8.54	3.40	1.45 fin 1.12 bilge	13.56	4944 fin 5127 bilge	1884
Eclipse 38	11.43	9.82	3.96	1.37	15.77	8154	3098
Eclipse 43	12.95	11.0	4.26	1.47	17.5	10433	3964

M/H = Masthead  
M = Metres  
Kgs = Kilogrammes