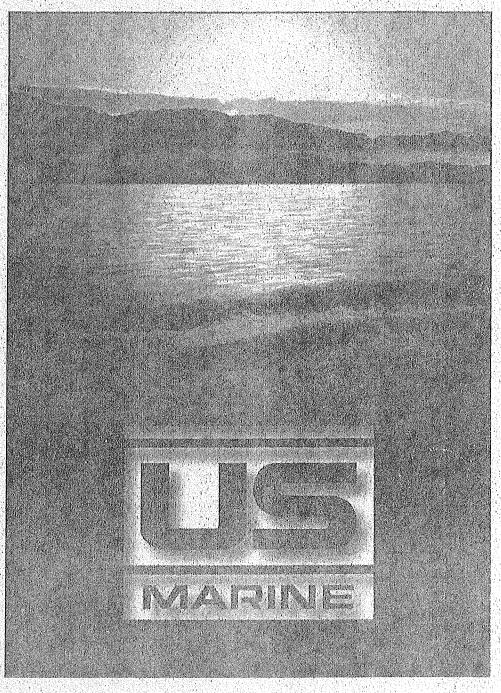
# 

## 5788 Pilothouse Motoryacht

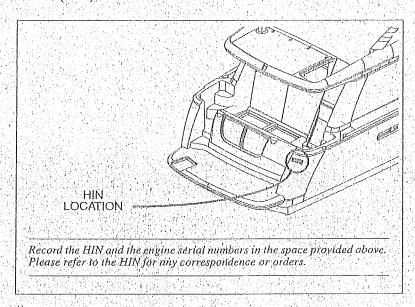


Owner's Manual Supplement

Hull Identification Number:	14			orps.					 V /	٢
		19 73 14 74								਼ੋ
Port Engine Serial Number:	Tomous Apriled				NORTH ROLL STONES LAND	******		andrian placeton		
				4. 2. 4. 4.						i,
Stbd. Engine Serial Number	A p			$11M_{\rm ph}$		san San				4

#### Hull Identification Number

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



#### © 1998 Bayliner Technical Publications. All rights reserved.

No part of this publication may be reproduced, stored in any retrieval system, or transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of Bayliner. Printed in the United States of America.

#### General Notes

The material in this document is for information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, Bayliner assumes no liability resulting from errors or omissions in this document, or from the use of information contained herein.

Due to our commitment to product improvement, Bayliner reserves the right to make changes in the product design, specifications, and equipment at any time without notice or obligation. Illustrations and/or photos may show optional equipment.

All Bayliner products meet or exceed USCO and/or NMMA construction standards. Manufactured with 1,1,1 Trichloroethane, a substance which harms public health and environment during the manufacturing process by destroying ozone in the upper atmosphere.

#### Proprietary Rights

This document discloses subject matter in which Bayliner has proprietary rights. The information and design disclosed herein were originated by and are the property of Bayliner. Neither receipt not possession thereof confers or transfers any right to reproduce, copy, alter or disclose the document or any part thereof, any information contained therein, or to construct boats or any item from it, except by written permission from or written agreement with Bayliner. This document is to be returned upon request to Bayliner.



# To Be The Best For Total Customer Satisfaction

## Congratulations and welcome aboard your new Bayliner Motoryacht!

Thank you for choosing our product. Bayliner, a division of US Marine, is committed to the goal of building the highest quality products in the marine industry and to providing the finest after-the-sale support in the world.

To keep our respected status as the number one boat builder in the world, US Marine has instituted an ongoing Total Customer Satisfaction Program. The guiding principles of this program are:

- Design, build and support the finest marine products in the world, in every market we serve.
- Be personally and individually responsible for the customer's total satisfaction.
- Remember that every customer has a choice, and we want them to choose US Marine!

Welcome to the US Marine family. We are looking forward to serving your boating needs, now and in the future!

## CONTENTS

CH	APTER 1: ABOUT THIS MANUAL	16	Dockside Television & Telephone Inlet
1	Hazard Warning Symbols	17	Appliances
1	Boating Experience	17	Lights
2	Dealer Service		17 Navigation & Interior Lights 18 Spotlight
2	Safety Standards	18	Propulsion
2	Engines/Accessories Guidelines		18 Engines
2	Qualified Maintenance		18 Engine Room Ventilation System 18 Engine Cooling System
2	Structural Limitations		19 Exhaust System
	artera. Componente / eveteme		19 Shaft-Transmission Alignment 19 Shaft Log Packless Sealing System
Uni	APTER 2: COMPONENTS / SYSTEMS	20	Oil Change System (Option)
3	Layout View	20	Fire Extinguishing System (Option)
3	Yacht Dimensions	20	Controls
3	Tank Capacities		20 Steering & Shift/Throttle System
4	Hull Exterior Hardware		21 Steering & Shift/Throttle Routing
5	Lifting Sling Locations		21 Shifter/Throttle Reservoir Routing 22 Trim Tabs
5	Deck Fill & Pump-out Locations		22 Bow Thruster
6	Deck Equipment	00	22 Rudder Stuffing Gland
	6 Windshield Wipers 6 Anchor Windlass	23	Bilge 23 Bilge Pumps
	6 Davit		23 Bilge Fumps 24 Autofloat Switches
7	Electrical System	25	Fuel System
8	DC Electrical System		25 Fuel Fills & Vents
	8 Circuit Breakers		25 Fuel Transfer Pump 26 Fuel Tank Routing
	8 Batteries 8 Battery Maintenance		26 Fuel System Routing
	8 Battery Monitor Selector		26 Fuel Filters & Separators 27 Fuel Quality
	8 Battery Switches 8 Engine Alternators	27	Freshwater System
	9 Battery Chargers	<i>a,</i>	27 Water Heater
9	AC Electrical System		28 Gray Water Drain System
	9 Shore Power 11 Shore Power Cable Hoist (Option)		28 Hot & Cold Water Routing 29 Freshwater Washdown
	11 Inverter Power (Option)	29	Seawater System
	11 Generator Power 12 Main Generator		29 Seawater Strainers
	13 Auxiliary Generator (Option)		29 Water Maker (Option) 30 Raw Water Washdown
14	Instruments	30	Air Conditioner & Heater (Option)
	14 Pilothouse Helm Layout	32	Diesel Heater & Defroster (Option)
	15 Command Bridge Helm Layout	33	Marine Head System & Holding Tank
15	Audio & Visual Equipment	33	Vacuum System
15	Navigation & Communication Equipment	ઝ	v sousin eyelen
	16 Depth Finder (Option) 16 Compass		
	16 Autopilot (Option)		
	16 VHF Radio (Option)		

#### APPENDIX A: ELECTRICAL ROUTING

34 Routing Key

34 Drawing 1: Battery Cable Routing

35 Drawing 2: Engine Harness

35 Drawing 3: Generator/Dockside Inlet Harness

36 Drawing 4: Diesel Heater Harness (Option)

36 Drawing 5: Winch Harness

37 Drawing 6: Forward Deck Harness 37 Drawing 7: Mid Deck Harness

#### APPENDIX B: WIRING SCHEMATICS

38 Electrical Symbol Key

38 Wire Color Key

39 Engine Harness

40 Hull Harness

41 Pilothouse Harness

42 Pilothouse Connector

42 Salon Harness

42 Arch Harness

43 V-Berth Harness

43 Diesel Heater (Option) 43 Command Bridge Harness

43 Generator Harness

44 DC Panel

45 AC Panel

46 Receptacle Circuits

46 Battery & Charging System

APPENDIX C: ISO SYMBOLS

APPENDIX D: LIMITED WARRANTY

#### ABOUT THIS MANUAL CHAPTER 1:

This Owner's Manual Supplement was prepared to provide specific information about your yacht. Please study this supplement and the Owner's Manual carefully, paying particular attention to the LIMITED WARRANTY section. Keep this supplement in a secure, yet readily available place.

## Hazard Warning Symbols

The hazard warning symbols shown below are used throughout this supplement to call attention to potentially dangerous situations which could lead to either personal injury or product damage. We urge you to read these warnings and the ISO symbols listed in Appendix C carefully. Follow all safety recommendations.

## DANGERI

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

## A WARNINGI

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

## CAUTION!

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

## NOTICE

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















## **Boating Experience**

If this is your first boat or if you are changing to a type of boat you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before assuming command of the yacht.

We strongly recommend that you take one of the boating safety classes offered by the U.S. Power Squadrons or the U.S. Coast Guard Auxiliary. For more course information, including dates and locations of upcoming classes, contact the organizations directly:

- U.S. Power Squadrons: 1-888-FOR-USPS (1-888-367-8777) or on the Internet at: http://www.usps.org
- o U.S. Coast Guard Auxiliary: 1-800-368-5647 or on the Internet at: http://www.cgaux.org

Outside the United States, your selling dealer, national sailing federation or local yacht club can advise you of local sea schools or competent instructors.

## WARNINGI

CONTROL HAZARD! A qualified operator must be in control of the yacht at all times. Do not operate your yacht while under the influence of alcohol or drugs.

#### Dealer Service

Make certain that you receive a full explanation of all systems from the selling dealer before taking delivery of your yacht. Your selling dealer is your key to service. If you experience any problems with your new yacht, immediately contact the selling dealer. If for any reason your selling dealer is unable to help, you can call us direct on our customer service hotline: 360-435-8957 or send us a FAX: 360-403-4235.

#### Safety Standards

Your yacht's mechanical and electrical systems were designed to meet safety standards in effect at the time it was built. Some of these standards were mandated by law; all of them were designed to insure your safety, and the safety of other people, vessels and property.

Please read the Owner's Manual and all accessory manuals for important safety standards and hazard information.





PERSONAL SAFETY HAZARD! Do not allow anyone to ride on parts of the yacht not designated for such use. Sitting on seat backs, lounging on the forward deck, bow riding, gunwale riding or occupying the transom platform while underway is especially hazardous and will cause personal injury or death.

### Engines/Accessories Guidelines

Your yacht's engines and accessories were selected to provide optimum performance and service. Installing different engines or other accessories may cause unwanted handling characteristics. Should you choose to install different engines or to add accessories that will affect the boat's running trim, have an experienced marine technician perform a safety inspection and handling test before operating your yacht again.

The engines and accessories installed on your yacht come with their own operation and maintenance manuals. We strongly urge you to read and understand these manuals before operating the engines/accessories.

#### Qualified Maintenance

## 

To maintain the integrity and safety of your yacht, only qualified personnel should perform maintenance on, or in any way modify: The steering system, propulsion system, engine control system, fuel system, environmental control system, electrical system or navigational system.

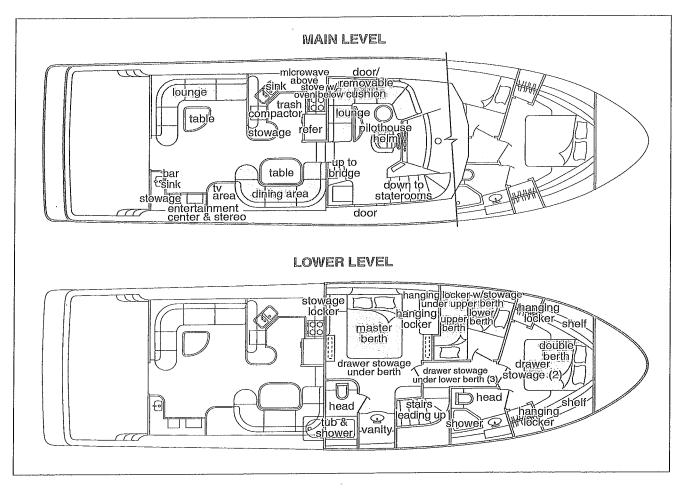
Failure to maintain your yacht's systems (listed in the warning above) as designed could violate the laws in your jurisdiction and could expose you and other people to the danger of bodily injury or accidental death. We recommend that you follow the instructions provided in this supplement, the *Owner's Manual*, the engine owner's manual and the accessory instruction sheets included with your boat.

#### Structural Limitations

The command bridge, transom platform and bow platform are designed to be lightweight for proper boat balance. The load limit for these platforms and the command bridge is 30 pounds per square foot, evenly distributed.

## CHAPTER 2: COMPONENTS / SYSTEMS

## Layout View



## Yacht Dimensions

Overall Length	Bridge Clearance*	Beam	Draft
59' 4"	19' 7"	17' 2"	4' 11"

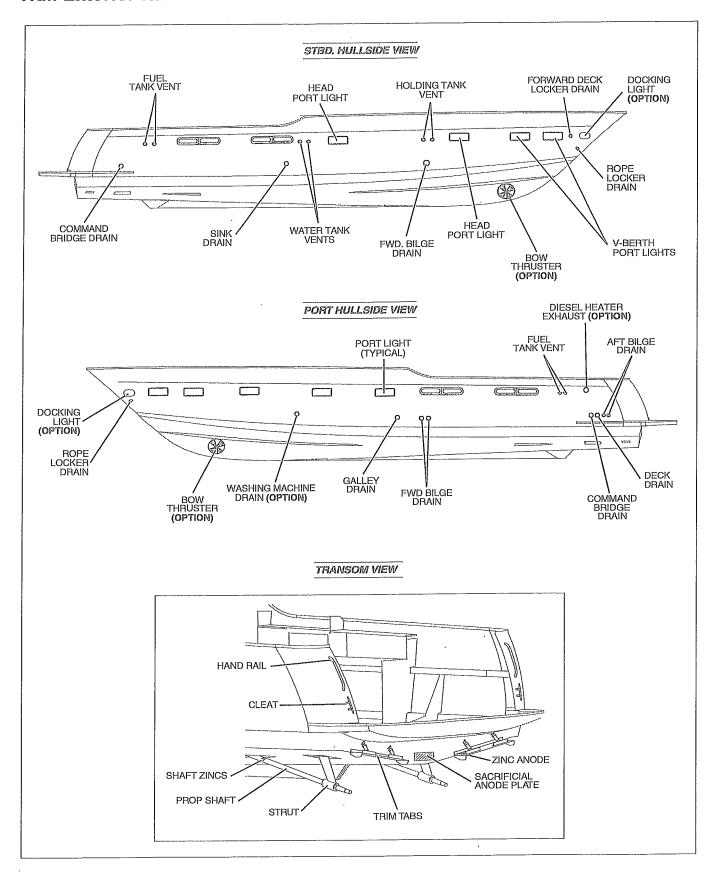
<sup>\*</sup>Includes radar arch

## Tank Capacities

Port Fuel Tank	Stbd. Fuel Tank	Port Freshwater Tank	Stbd. Freshwater	Holding Tank
Capacity (gal)	Capacity (gal)	Capacity (gal)	Tank Capacity (gal)	Capacity (gal)
400	400	115	103	76

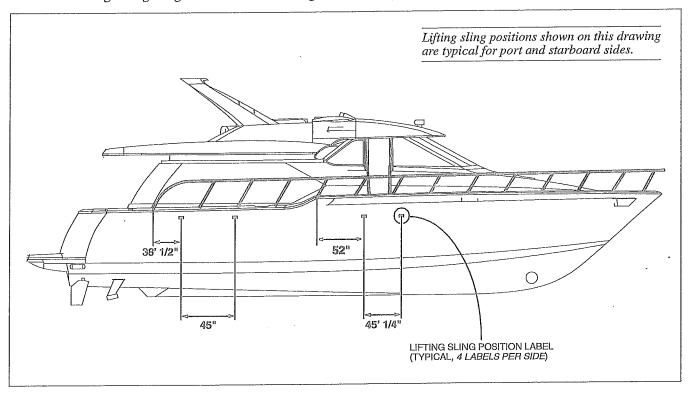


## Hull Exterior Hardware

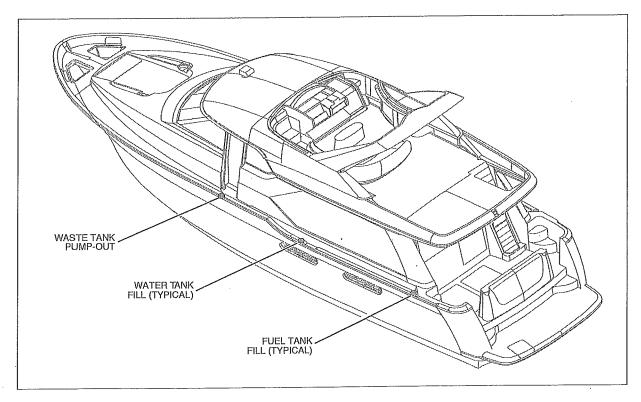


## Lifting Sling Locations

Use the following lifting sling locations when raising or lowering your yacht in or out of the water:



## Deck Fill & Pump-out Locations



#### BALLINER°

#### Deck Equipment

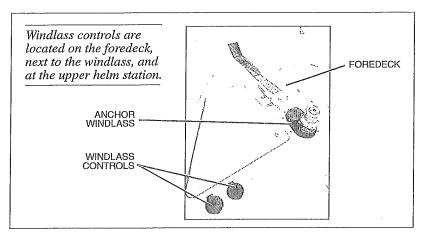
#### Windshield Wipers

- Windshield wiper and washer switches are located on the pilothouse helm's upper accessory panel.
- Periodically, due to wear and environmental exposure, you will need to replace wiper blades using 28" blade refills. Instructions for replacing the wipers can be found on the wiper replacement package.
- The windshield wiper fluid bottle is located in the pilothouse and can be accessed from underneath the port forward L-shaped lounge. The windshield wiper fluid level should be checked occasionally and refilled as necessary.

#### Anchor Windlass

Before using the anchor windlass, read the windlass manual included in your yacht's owner's packet and observe the following:

- To haul the anchor, use engine power (*not* the windlass) to move the boat to, and directly over the anchor.
- Disengage the anchor from the bottom by pulling it *straight up* with the windlass. *Do not* pull the boat to the anchor using the windlass or continue to operate the anchor windlass if it stalls or is overloaded.

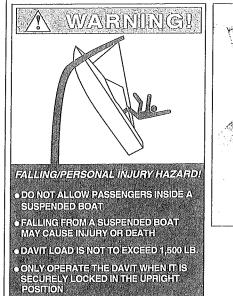


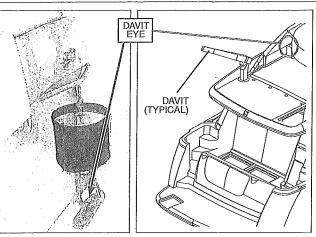
#### Davit

Your yacht is equipped with a hydraulic davit (winch) or an optional hydraulic davit upgrade. Please read the davit's manual which explains detailed operating instructions and safety hazards. The davit controls are typically located on the back side of the davit, just above the davit base.

#### Observe the following:

- Inspect the davit's cable often for wear and replace if frayed.
- The cable should be kept tight and even on the spool and when under tension during winch operation.
- Disconnect the davit's cables from the quick-disconnect fittings (mounted on the bulkhead) when the davit is not in use.
- After lifting a load onto the yacht, remove the davit cables and secure the load to the deck.





Always secure the davit to the davit eye when the davit is not in use.

## ! Warning!

- Since water is heavy, lifting the dinghy to drain its bilge may exceed the davit's load limit of 1, 500 pounds.
- Use extreme care when using the davit in rough weather or rough sea conditions as the load may start swinging.

### Electrical System

We strongly recommend you read and understand this chapter and the electrical section of the *Owner's Manual*. Electrical routing drawings are provided in Appendix A of this manual; wiring schematics in Appendix B.

## A DANGER!



### EXTREME FIRE, SHOCK & EXPLOSION HAZARD!

- To minimize the risks of fire and explosion, *never* install knife switches or other arcing devices in the fuel compartments.
- Never substitute automotive parts for marine parts. Electrical, ignition and fuel system
  parts were designed and manufactured to comply with rules and regulations that minimize
  risks of fire and explosion.
- Do not modify the electrical systems or relevant drawings.
- Only qualified personnel should install batteries and/or perform electrical system maintenance.
- Insure that all battery switches are in the off position before performing any work in the engine spaces.



## FIRE, OPEN FLAME & EXPLOSION HAZARD!

- Fuel fumes are heavier than air and will collect in the bilge areas where they can be accidently ignited. Visually and by smell (sniff test), check the engine and fuel compartments for fumes or accumulation of fuel. Always operate the bilge blowers for at least four minutes prior to engine starting, electrical system maintenance or activation of electrical devices.
- Minimize the danger of fire and explosion by not exposing batteries to open flame or sparks. It is also important that no one smoke anywhere near the batteries.

## !\ CAUTION!



#### SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

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

## NOTICE

Electrical connections are prone to corrosion. To reduce corrosion-caused electrical problems, keep all electrical connections clean and periodically coat them with a product specifically designed to control and prevent corrosion.

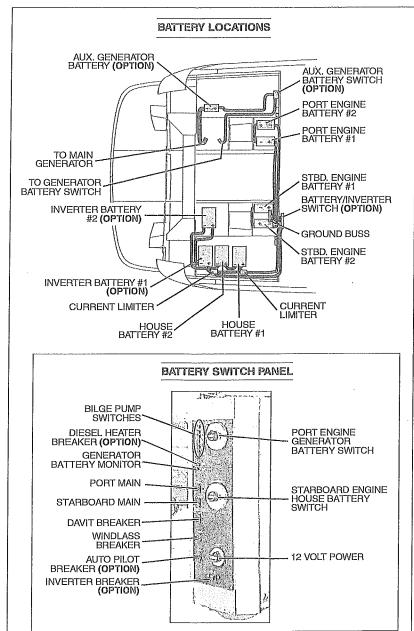
### DC Electrical System

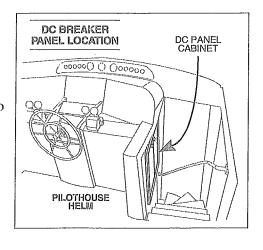
#### Circuit Breakers

- Individual component circuit breakers are found on the DC breaker panel, which is located inside the DC cabinet on the starboard side of the pilothouse. Individual breakers *must* be activated to supply power to the components you wish to use.
- The master circuit breakers for windlass power and davit power are located next to the battery switches on the aft engine room bulkhead.

#### Batteries

The batteries installed in your yacht's generator compartment supply electricity for lights, accessories as well as engine and generator starting. Always observe the following:





#### Battery Maintenance

- Periodically remove the battery caps and check the electrolyte level; if the zinc plates are exposed, add distilled water until they are covered.
- Corroded battery terminals can be cleaned with baking soda and water. After cleaning the terminals, coat them with a light film of battery terminal lubricant and tighten all battery connections.

#### Battery Monitor Selector

The condition of each battery can be checked on the DC panel's battery monitor selector.

#### Battery Switches

- Separate rotary battery switches for each battery are located on the aft engine room bulkhead's battery switch panel. Generator battery switches are located in the generator compartment.
- An emergency crossover switch (parallel switch) at the pilothouse helm enables you to start an engine using both engine batteries if the designated engine battery is low.

## A CAUTION!

- The crossover switch should be turned on *only* in emergencies.
- Never disconnect battery cables or turn off main battery switches while engines are running as this can cause damage to your boat's electrical components.

#### Engine Alternators

The alternators maintain proper charge levels in the engine and accessory batteries.

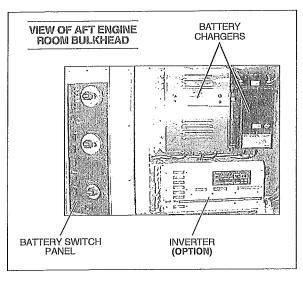
#### Battery Chargers

Your yacht is equipped with two battery chargers, located on the aft engine room bulkhead. The circuit breakers for the battery chargers are located on the AC panel and must be turned *on* for charging to occur.

We recommend that you thoroughly read and understand the battery charger manual provided in your yacht's owner's packet before using the chargers.

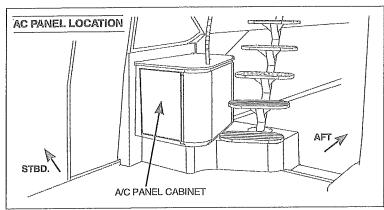
## A CAUTION!

The battery charging systems (alternator and battery chargers) installed on your yacht are designed to charge conventional lead-acid batteries. Before installing gel-cell or other new technology batteries, consult with the battery manufacturer about charging systems requirements.



### **AC Electrical System**

- Your yacht uses 120v AC/60Hz and 240v AC/60Hz systems.
- The AC system can be energized by shore power, inverter power or generator power.
- The master circuit breakers, located on the AC panel, provides power source selections to AC powered accessories. Individual breakers must be activated to supply power to the accessories you wish to use.
- This system is designed so that ship's power and shore power sources *cannot* supply power simultaneously.



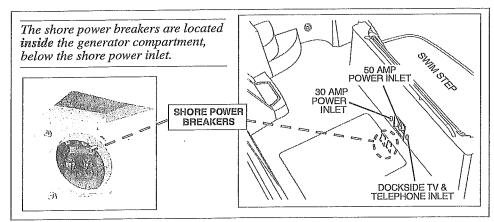
## A CAUTION!

WATER HEATER DAMAGE HAZARD! Do not energize the AC water heater electrical circuit until the heater is completely filled with water. Even momentary operation in a dry tank will damage the heating elements. Warranty replacements will not be made on elements or tank damaged in this manner.

#### Shore Power

The shore power receptacles are located on the aft cockpit transom and are rated 240v/50 amps and 120v/30 amps.

Some dockside installations may not be rated for 30 or 50 amps, therefore, you may need to purchase lower amp adapters. Whenever a lower amp adapter is used, however, there will be a corresponding drop in supplied power from the dockside system.



 Before connecting to shore power, ensure all breakers and switches on the AC master panel are in the off position and switch off the corresponding shore power breaker, located in the generator compartment. 10

## 1 DANGER!



#### FIRE, EXPLOSION & SHOCK HAZARD!

- o To minimize shock and fire hazard, do not modify electrical systems or relevant drawings.
- Do not alter shore power connectors and use only compatible connectors.
- Only qualified personnel should install batteries and/or perform electrical system maintenance.
- Before connecting to shore power, ensure all breakers and switches on the AC master panel are in the off position.
- To prevent shock or injury from an accidental dropping of the "hot" cord into the water, always attach the shore power cord to the boat inlet first, then to the dockside connection.

## A CAUTION!



#### SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

- Never connect dockside power to your boat outside North America unless you've purchased the international electrical conversion option.
- Use double insulated or three-wire protected electrical appliances whenever possible.
- 1. Monitor the electrical control panel's polarity indicator lights on the AC panel:
  - A *green* light illuminating after the power cord is plugged into the yacht's external power receptacle indicates acceptable electrical power in which you may energize the main breaker switches.
  - A <u>red</u> light, however, indicates reversed polarity, which could cause electrical system damage and possibly electrical shock injuries. In this case, *do not* energize the main breaker switches.



#### SHOCK & ELECTRICAL SYSTEM DAMAGE HAZARD!

- You must monitor the polarity indicator lights every time you connect to shore power.
- When connecting to shore power and you encounter reversed polarity light (<u>red</u> colored), *do not* energize the main breaker switches. Instead, *immediately* disconnect the shore power cord (always from the dockside receptacle first) and notify marina management.
- 2. Activate the AC system by turning the main ship/shore breaker to the shore position.
- 3. Turn on the master breaker and individual component breaker as required.

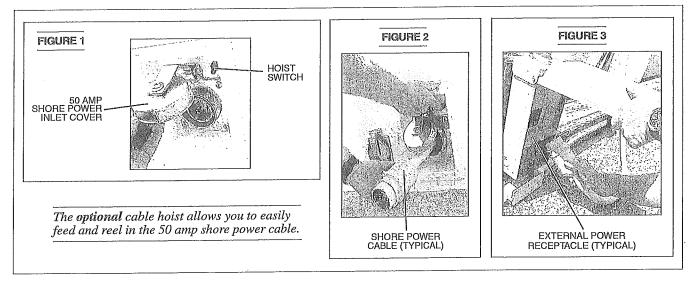
#### NOTICE

- When using shore power, the simultaneous operation of several AC accessories can result in an overloaded circuit. It may be necessary to turn off one accessory while operating another.
- Voltage on each line can be read by setting the voltmeter selector switch.
- · Amperage draw can be read on the ammeter gauge.

#### Shore Power Cable Hoist (Option)

Your yacht may feature an optional cable hoist which allows you to easily feed out and reel in the 50 amp shore power cable. We recommend that you read the cable hoist manual, included in your yacht's owner's packet.

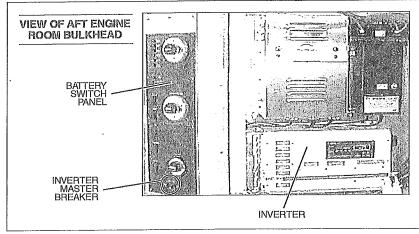
- 1. Lift open the shore power inlet cover and locate the hoist switch (figure 1).
- 2. Turn on the hoist switch to feed the cable out (figure 2). When the desired length is reached, turn the switch off.
- 3. Plug the shore power cable into the external power receptacle (figure 3) and follow the directions given in the *Connecting to Shore Power* section on the previous page.
- 4. After disconnecting the yacht's shore power cable from the external power receptacle, use the hoist switch to retract the cable back onto the reel, making sure the cable doesn't fall into the water.



#### Inverter Power (Option)

Your yacht may feature an **optional** inverter, which is located on the aft engine room bulkhead. Refer to the inverter manual for detailed inverter operating procedures.

- Activate the AC system under inverter power by switching *on* the inverter master breaker (located on the bottom of the battery switch panel) and pressing the on/off switch on the inverter control panel (located on the inverter).
- The inverter only provides AC power to the accessories on the AC panel that have white breakers. Individual breakers *must* be activated to supply power to the accessories you wish to use.

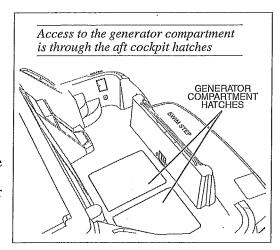


#### Generator Power

Your yacht is equipped with a main generator and may also feature an **optional** auxiliary generator. The generators are located in the generator compartment. Access to the generator compartment is through the aft cockpit hatches. Prior to initially operating your generator(s) we strongly urge you to read the generator operation manual(s) for prestart checks and break-in procedures. The manuals are included in your yacht's owner's packet

Observe the following about your generator(s):

- Polarity has been established in the installation of the generator(s), therefore the polarity lights will not function in this mode.
- Fuel to run the main generator is supplied from the starboard fuel tank; fuel to run the optional auxiliary generator is supplied from the port fuel tank.
- o In addition to servicing the filters attached to the generator(s), the filters/separators (located near the fuel line valves) should be serviced as described in the manufacturer's manual.
- The coolant mixture installed at the factory consists of equal parts of water and antifreeze (Ethylene Glycol). The coolant bottle for the main generator is located on the forward bulkhead in the generator compartment; the coolant bottle for the optional auxiliary generator is located on the port side of the generator compartment.
- Frequently check the generator(s) seawater strainer for leaks and/or debris.
- Oil pressure, water temperature, and voltage gauges are provided on the AC panel. These gauges monitor the engine functions of your generator(s).



#### Main Generator

#### Starting the main generator:

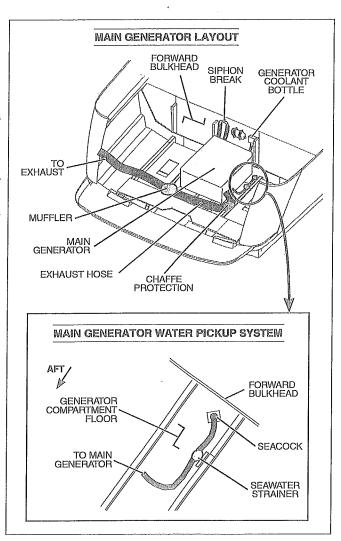
- 1. Open the main generator's seacock valve before starting the generator. *Keep the seacock valve open during generator operation.*
- 2. Operate the bilge blowers for a minimum of four minutes before starting the generator. Leave the blowers on while the generator is operating unless your yacht is running at cruising speed.
- 3. Verify that the generator's battery switch, located in the generator compartment, is turned *on*.
- 4. On the AC panel, press and hold the preheat switch for one minute to initiate preheating.
- 5. While holding the generator's preheat switch, press the start button. As the engine starts, continue to hold the preheat switch until oil pressure is indicated on the pressure gauge.

## NOTICE

*Never* operate the starter for more than 30 seconds. If the generator does not start, wait at least 30 seconds before another start attempt is made.

- 6. On the 240v AC panel (below the AC generator panel), slide the T-bar left (from shore to generator power). To activate the AC system under generator power, switch the generator master circuit breaker *on*, then activate each individual component breaker as required.
- 7. To monitor the voltage generated by the generator, switch the shore/generator voltage switch to *generator*.

To shut off the main generator: Hold the "off" switch until the generator shuts down.



#### Auxiliary Generator (Option)

#### Starting the auxiliary generator:

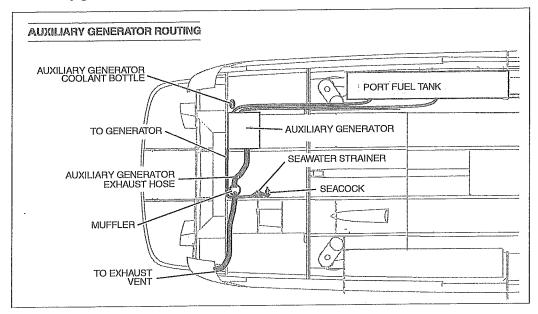
- 1. Open the auxiliary generator's seacock valve before starting the auxiliary generator. The seacock must remain open during generator operation.
- 2. Operate the bilge blowers for a minimum of four minutes before starting the generator. Leave the blowers on while the generator is operating unless your yacht is running at cruising speed.
- 3. Verify that the generator's battery switch, located in the generator compartment, is turned on before attempting to start the generator.
- 4. On the auxiliary generator's display panel, located on the AC panel, press the generator's "on" button.
- 5. Push and hold the generator preheat switch for approximately 30 seconds.
- 6. Release the preheat switch and push the start button until the AC light illuminates on the AC panel.

## NOTICE

*Never* operate the starter for more than 30 seconds. If the generator does not start, wait at least 30 seconds before another start attempt is made.

- 7. Switch the selector switch to auxiliary generator power. The green AC light, located above the main generator breaker, should illuminate.
- 8. On the 240v AC panel (below the AC generator panel), slide the T-bar left (from shore to generator power). To activate the AC system under generator power, switch the generator master circuit breaker *on*, then activate each individual component breaker as required.
- 9. To show the voltage generated by the generator, switch the shore/generator voltage switch to generator.

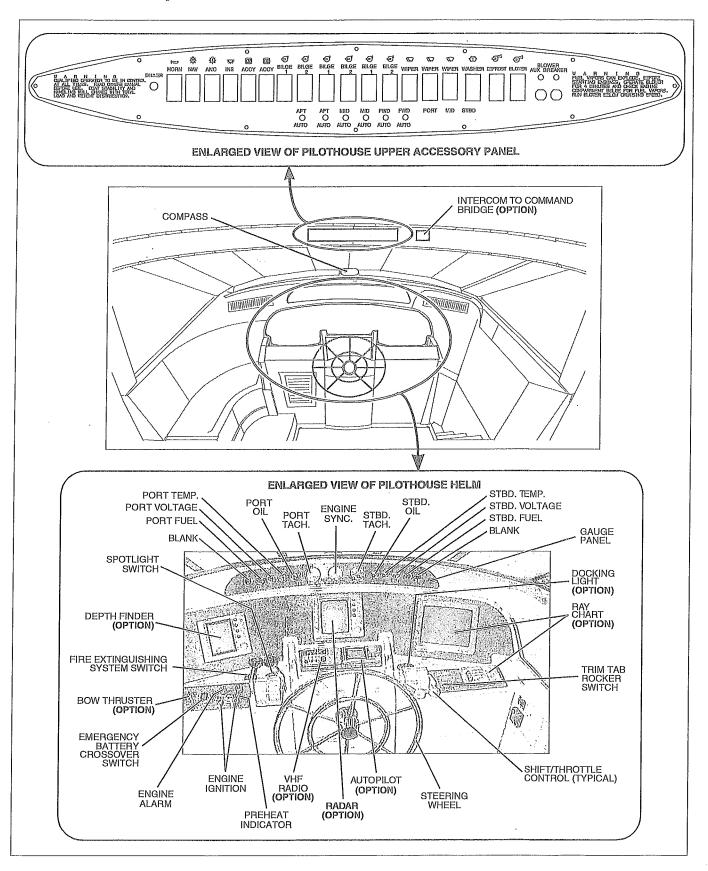
To shut off the auxiliary generator: Hold the "off" switch until the generator shuts down.



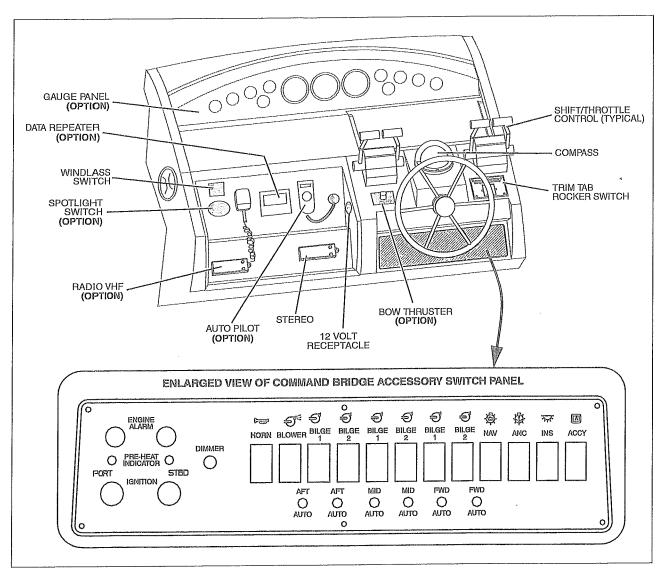
#### Instruments

14

#### Pilothouse Helm Layout



#### Command Bridge Helm Layout



## Audio & Visual Equipment

All audio and visual equipment installed on your yacht have separate manuals explaining their operating instructions.



## Navigation & Communication Equipment

The owner's packet contains operation manuals for all navigation & communication equipment installed on your yacht. We *strongly* recommend that you thoroughly read and understand these manuals before using these systems for the first time and observe the following:



#### Depth Finder (Option)

Your motoryacht may feature an optional depth finder (depth sounder) at the pilothouse helm station. The depth finder provides you with measurements of water depth beneath the boat.

## /\ WARNINGI

- Do not use the depth finder as a navigational aid to prevent collision, grounding, boat damage or personal injury.
- When the boat is moving, submerged objects will not be seen until they are already under the boat. Bottom depths may change too quickly to allow time for the boat operator to react.
   If you suspect shallow water or submerged objects, operate the boat at very slow speeds.

#### Compass

Your yacht is equipped with two compasses, one at each helm station. Carefully read and follow the manufacturer's calibration and operating instructions provided in the boat's owner's packet

#### NOTICE

Compass accuracy can be affected by many factors. We strongly recommend having a qualified technician calibrate your compass. Make sure the technician gives you a deviation card which shows the corrections to apply in navigational calculations. Keep a copy of the deviation card at each helm.

#### Autopilot (Option)

Your yacht may feature an optional autopilot system which can be activated from either helm. The autopilot will aid you in maintaining the chosen heading of your yacht automatically.

## 

Never leave the helm while the autopilot system is on! Someone should always stay at the helm as a lookout in case a dangerous situation suddenly develops.

## NOTICE

The autopilot system is only an aid to navigation. It's accuracy can be affected by many factors, including equipment failure or defects, environmental conditions & improper handling or use.

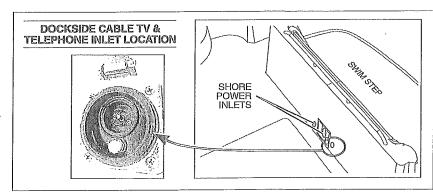
#### VHF Radio (Option)

Your yacht may include an optional VHF (Very High Frequency) radio. The VHF radio can be used to access weather reports, summon assistance or contact other vessels as permitted by the FCC (Federal Communications Commission). Contact the FCC for licensing, rules and regulations concerning VHF radio usage.

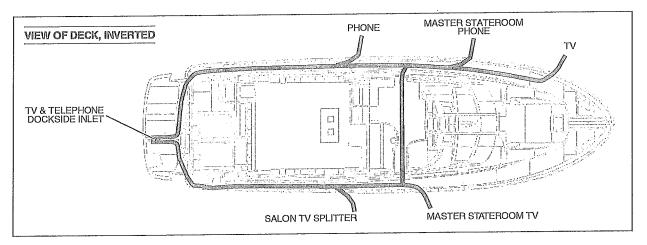
## **Dockside Television & Telephone Inlet**

Your yacht is equipped with a dockside cable TV (television) and telephone inlet.

- The TV/telephone dockside inlet is located on the aft transom bulkhead, next to the shore power inlets.
- To use a telephone or receive cable TV transmission, the yacht must be hooked up to a dockside source using the TV/ telephone inlet.



#### Television & Cable TV Routing



## **Appliances**

The owner's packet includes operating and maintenance manuals for all appliances installed in your yacht. Carefully read and understand these manuals before attempting to operate or perform maintenance on any appliance.

Appliances operate on 120v AC power, which may be supplied from shore power, generator power or inverter power (the inverter supplies power to the blender, ice maker, refrigerator and receptacles only). Make sure the AC breaker is activated for the appliance you wish to turn on.

WARNING



- SCALDING HAZARD!
- Do not touch stove burners, grates or areas near the stove units as they may be hot even
  when they are dark in color. Areas near burners and grates may become hot enough to
  cause burns.
- During and after use, do not touch or let clothing or other flammable material come in contact with heated units or areas near the units (burner tops, main frame sides and back, sea rails and pot holders) until they have had sufficient time to cool.

## Lights

#### Navigation & Interior Lights

We strongly recommend that you understand navigation light usage by reading the navigation section of the *Owner's Manual*. The navigation and interior lights supplied with your yacht are of top quality, but you should be aware that failure may periodically occur for a variety of reasons:

- There may be a blown fuse (Replace the fuse in the switch panel).
- The bulb may be burned out (Carry spare bulbs for replacement).
- The bulb base may be corroded (Clean the base and coat it with non-conductive electrical lubricant).
- A wire may be damaged or may have come loose (Repair as required).

## A CAUTION!

- Avoid the storage of gear where it would block navigation lights from view.
- Prolonged operation of cabin interior lights (overnight) will result in a drained battery. Be conservative in the use of battery power.



#### Spotlight

Your yacht is equipped with a spotlight on the command bridge of your yacht and can be controlled from either helm station. Please read the operating instructions included in your yacht's owner's packet.

#### Propulsion

#### Engines

The owner's packet contains detailed engine operation and maintenance manuals. Read and understand these manuals *before* operating or performing maintenance to the engines.

#### Engine Room Ventilation System

The bilge blowers remove fumes from the engine room and draws fresh air into the compartment through the deck vents. To ensure fresh air circulation, operate the bilge blowers for at least four minutes before starting the engines or generator(s) and while operating the yacht below cruising speed.





Operation of the blower system is not a guarantee that explosive fumes have been removed. If you smell any fuel, *do not* start the engines. If the engines are already running, immediately shut off the engines and all electrical accessories and investigate immediately. *Do not* obstruct or modify the ventilation system.

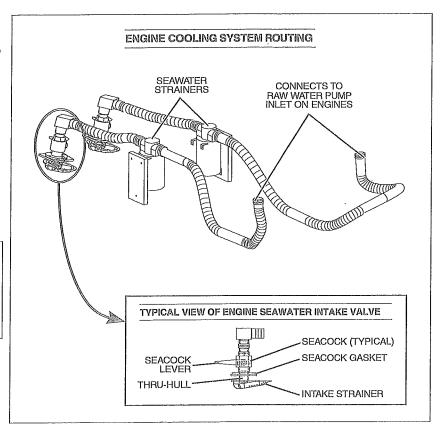
#### Engine Cooling System

The engine cooling system circulates raw water around components and through a (freshwater) heat exhanger on the engine to reduce engine temperature.

- Make sure both engine seawater intake valves (seacocks) are open before starting the engines and keep the seacocks open while the engines are running.
- The cooling system's seawater strainers should be checked for leaks and debris every time you use your yacht. For instructions on how to clean the seawater strainers, see the Seawater Strainer section of this supplement.



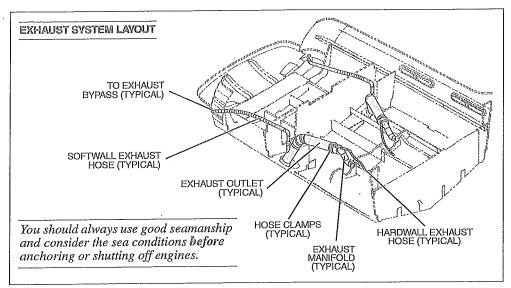
SYSTEM DAMAGE HAZARD! The engine cooling system's seacocks must be opened before engines are started and during engine operation.



#### Exhaust System

Your yacht's exhaust system is designed to keep water out of the engines in most sea conditions, however, do not anchor stern to sea, and do not shut off the engines if the seas are too high.

Check all of the exhaust hose clamps after the first 20 hours of engine operation and periodically after that.



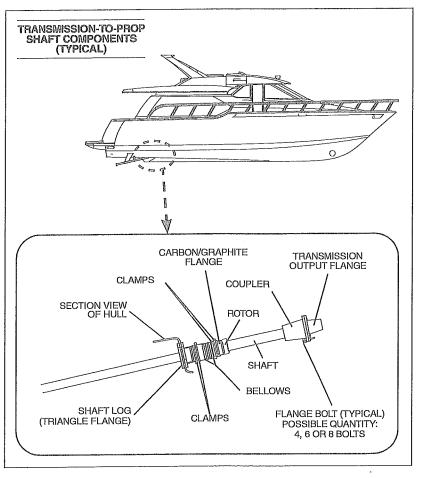
#### Shaft-Transmission Alignment

Alignment between the engine transmission output shaft and the propeller is very critical. The alignment has been performed at the factory and was rechecked by the dealer after the boat had been in the water for 48 hours.

- An alignment inspection should be performed by a marine mechanic as part of the routine maintenance program after the initial 30 hours of operation, then every 60 hours and whenever unusual noise or vibration is noticed.
- Shaft-transmission alignment should be performed by a marine mechanic since it requires moving the engine and prop shaft.
- To insure proper alignment after a haulout or dry storage, wait 48 hours after launching before final alignment adjustments by a marine mechanic are made.

## A CAUTION!

SYSTEM DAMAGE HAZARD! If you suspect a shaft-transmission misalignment, have a qualified mechanic perform an alignment inspection as soon as possible. Continued use may lead to premature engine, transmission, shaft, shaft seal and/or hull damage!



#### Shaft Log Packless Sealing System

The shaft log packless sealing system's shaft seal is a maintenance-free, watertight seal that doesn't require packing or adjustments.

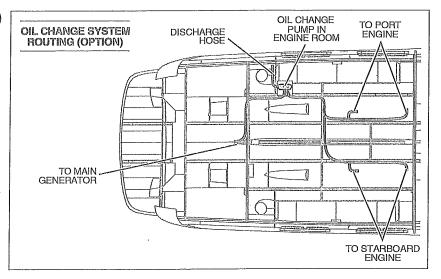


### Oil Change System (Option)

Your yacht may be equipped with an optional oil change system.

This system allows you to easily change the oil in your yacht's engines and main generator without the use of tools.

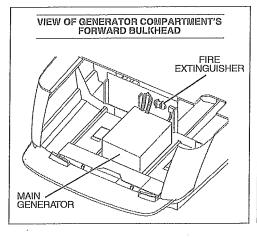
- The oil change system lets you to pump out (some or all) old oil, or pump in fresh oil to the engines or generator.
- Before using this system, we suggest that you read the manufacturer's operating instruction manual supplied in your yacht's owner's packet.

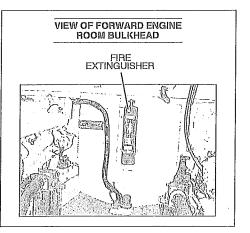


## Fire Extinguishing System (Option)

Your yacht may feature an **optional** fire extinguishing system. This system is designed to automatically activate whenever direct heat from a fire is detected in the engine room or generator compartment.

We strongly recommend that you read and understand the fire extinguisher system's instruction and maintenance manual before using your yacht for the first time and observe the following:





- When the fire extinguishing system is activated, both engines will automatically shut down. Since the extinguishing agent is completely non-residual, it is often possible to restart the engines after an extinguisher has discharged in the engine room. Before attempting to restart the engines, however, you must activate the fire extinguisher system's override switch, located at each helm station.
- Extinguishers should be removed semiannually and inspected according to the manufacturer's manual.

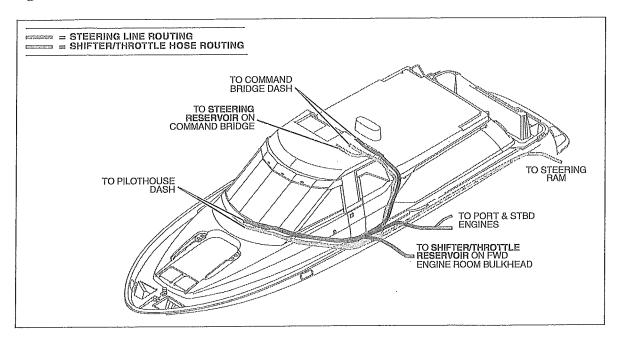
#### Controls

#### Steering & Shift/Throttle System

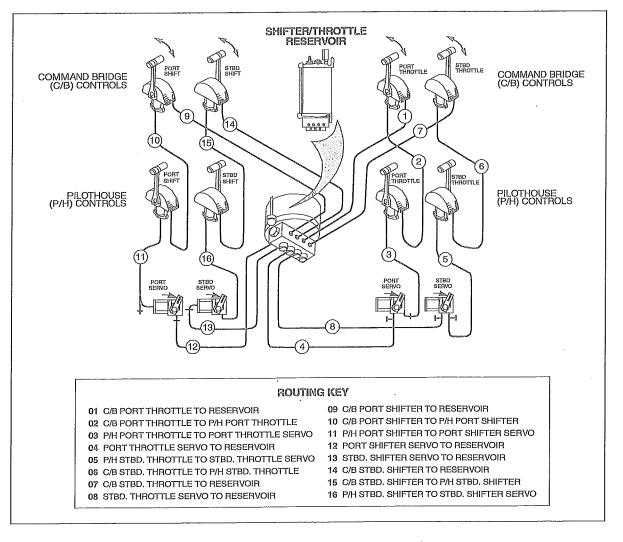
Your yacht is equipped with a manual hydraulic steering system, therefore the system will not operate as easily as a car's power steering.

- o A rhythmic pulsing when turning the wheel is a characteristic of the pump and is *not* a malfunction. Also, when coming off a hard-over position, resistances may be felt, followed by a distinct sound. This is a normal situation resulting from the release of the system's check valve.
- The fluid reservoir for the hydraulic steering system is located behind the command bridge helm. The shifter/
  throttle fluid reservoir is located on the forward engine room bulkhead. Follow the instructions and maintenance
  suggestions in the steering manual and on the reservoir. Check the fluid levels and pressure regularly.

#### Steering & Shift/Throttle Routing



#### Shifter/Throttle Reservoir Routing



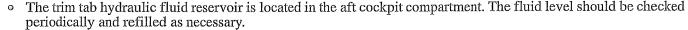
#### Trim Tabs

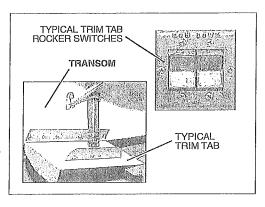
22

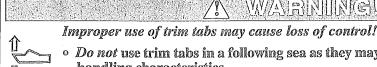
Trim tabs control the longitudinal and lateral trim of your boat at cruising speeds and are adjusted using the trim tab rocker switches located at each helm station.

Before using the trim tab rocker switches, we strongly urge you to read and understand the trim tab operation manual included in your yacht's owner's packet. Always observe the following:

- Once the best bow cruising trim is reached, use the port or starboard trim switches (one at a time) to correct unequal lateral loading. Do not use trim tabs to compensate for excessive unequal weight distribution.
- Trim tab adjustment should be performed by several short touches to the switch rather than one long one. After each short touch allow about five seconds for the hull to react.







Do not use trim tabs in a following sea as they may cause broaching or other unsafe handling characteristics.

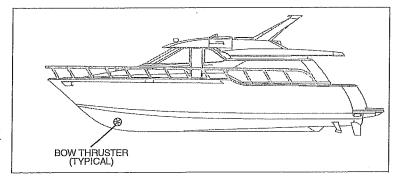
WARNINGI

Do not allow anyone unfamiliar with trim tabs to operate them.

#### Bow Thruster

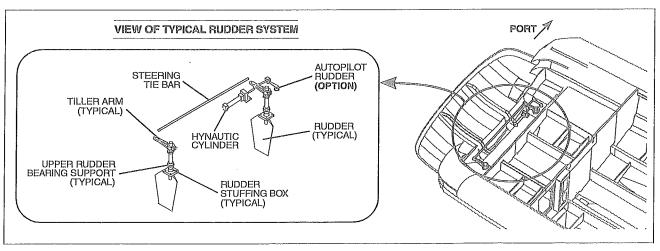
Your yacht may feature an optional bow thruster which can be controlled from either helm. The bow thruster allows you to maneuver the yacht into close quarters when docking. Access to the bow thruster motor is through the carpeted cutout in the forward stateroom floor.

Please refer to the bow thruster's operation manual included in the yacht's owner's packet before operating the bow thruster for the first time.



#### Rudder Stuffing Gland

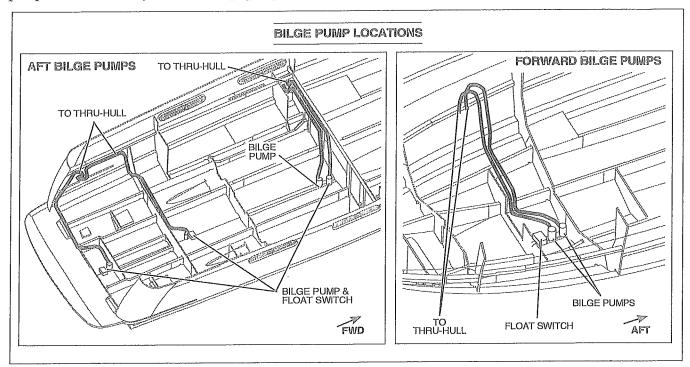
The rudder stuffing gland is part of the assembly where the rudders emerge from the bottom of the boat. The shaft stuffing gland should *not* leak any water.



### Bilge

#### Bilge Pumps

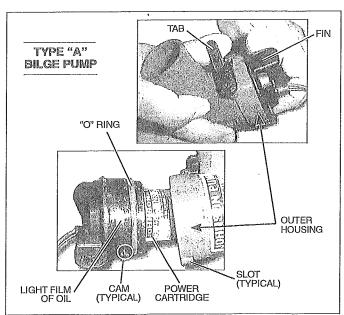
Your yacht is equipped with six impeller-type bilge pumps which are used to pump water out of the bilge. Bilge pumps are controlled by automatic bilge pump float switches (autofloat switches) and/or switches on the dash panel.



There are two types of bilge pumps (type A and B) installed on your yacht. These pumps should be tested often to verify they are working properly. To test a bilge pump, activate the dash-mounted switch and verify that water in the bilge is being pumped overboard. If bilge water is present and the pump motor is running but *not* pumping, inspect the discharge hose for a kink or collapsed area. If no problems are found, check the bilge pump housing for clogging debris as follows:

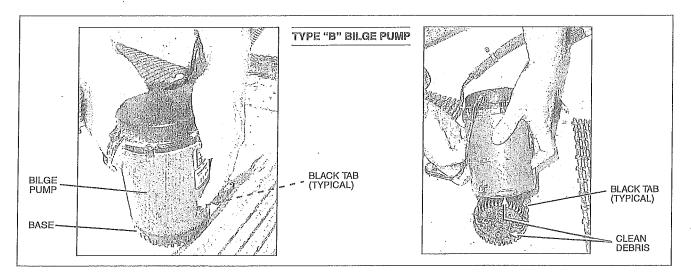
To check for clogging debris in type "A" pumps:

- 1. Remove the power cartridge:
  - a. Lift the tab while rotating the fins counterclockwise.
  - b. Lift out the power cartridge.
  - c. Clear the outer housing of debris.
- 2. Reinstall the power cartridge:
  - a. Make sure the "O" ring is properly seated.
  - b. Coat the "O" ring with a light film of vegetable or mineral oil.
  - c. Align the two cams on either side of the power cartridge with the two slots on the outer housing and press the power cartridge into the housing while twisting clockwise.
  - d. To ensure proper reinstallation, attempt to twist the fins counterclockwise without lifting the tab: The cartridge should stay in place.



To check for clogging debris in type "B" pumps:

- 1. Locate the two black tabs on opposite sides of the bilge pump. Push the tabs in simultaneously and pull the pump away from the base.
- 2. Clean debris from the base and the bottom opening of the pump.
- 3. Reattach the pump to the base by aligning the tabs on the base to the tab holes on the bottom of the pump. Once aligned, push the pump down onto the base until secured.



## NOTICE

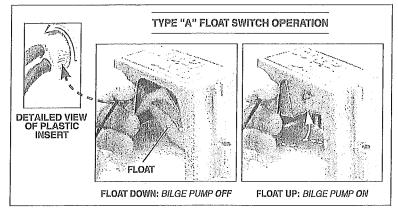
Discharge of oil, oil waste or fuel into navigable waters is prohibited by law. Violators are subject to legal action by the local authorities.

#### Autofloat Switches

Automatic bilge pumps use an electromagnetic float (autofloat) switch to automatically activate the pump whenever water accumulates above a preset level in the bilge. Autofloat switches are mounted next to the bilge pump it activates, and are wired directly to the battery so they will normally function even when the yacht is completely shut down and left unattended. Autofloat switches should be tested often for proper operation.

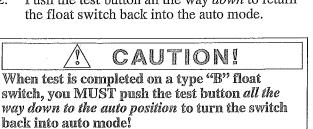
To test a type "A" float switch:

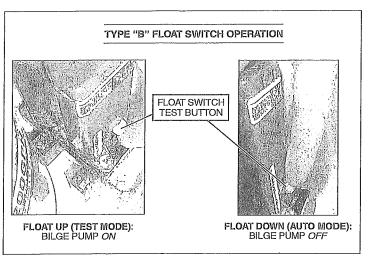
- 1. Lift the float *up* by turning the plastic float switch insert (where the wires enter the housing) 1/4 turn counterclockwise. As the float is lifted, the bilge pump should turn on. If lifting the float does not turn the pump on, check the inline fuse. If the fuse is good but the switch does not work, it may indicate a bad switch or possibly a low battery.
- 2. Release the plastic insert to automatically lowers the float and returns the float switch to auto mode.



To test a type "B" float switch:

- Push the float switch test button up to activate the bilge pump. If the pump does not turn on, check the inline fuse. If the fuse is good but the switch doesn't work, it may indicate a bad switch or possibly a low battery.
- 2. Push the test button all the way down to return the float switch back into the auto mode.





#### Fuel System

Carefully read the fuel section of the Owner's Manual and the engine operation manual, paying special attention to the subject of fuel recommendations. These manuals can be found in your yacht's owner's packet.

#### Fuel Fills & Vents

- Fuel fills are located on the port and starboard side decks, just aft of the bow rail. Fuel receptacle caps are marked "Diesel". If you experience difficulty filling a fuel tank, check to see that the fuel fill and vent lines are free of obstructions and kinks.
- Fuel vents are located in the hull below the same general area as the fill.



- It is very important that the fuel system be inspected thoroughly the first time it is filled and at each subsequent filling.
- The fueling instructions in the Owner's Manual and the fuel recommendations in the engine operation manual must be followed.

## CAUTION!

- Air in the diesel supply system can stop an engine or severely restrict performance. If you suspect air in the fuel lines, refer to your engine operation manual for detailed instructions on how to bleed the system.
- Avoid the storage or handling of gear near the fuel lines, fittings and tank.

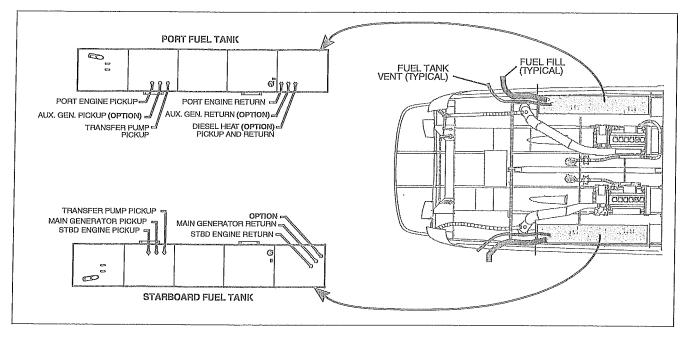
#### Fuel Transfer Pump

The fuel transfer pump is used to draw fuel from a full tank to a nearly empty tank. The fuel transfer pump switch is activated by the fuel transfer switch, located at the pilothouse helm station.

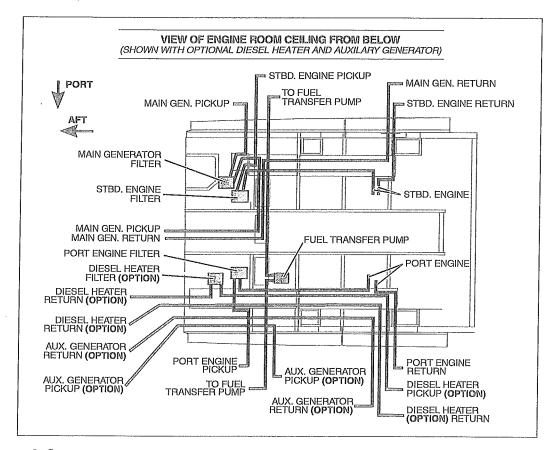
## CAUTION!

ENVIRONMENTAL HAZARD! NEVER transfer fuel into a full (or nearly full) fuel tank. Fuel transferred into a full tank may spill overboard through the tank venting system.

#### Fuel Tank Routing



Fuel System Routing



Fuel Filters & Separators

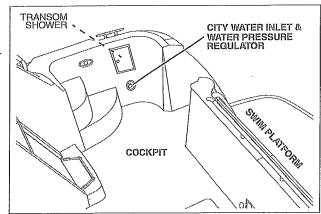
Fuel filters and separators should be inspected periodically for debris and replaced as needed (according to the instructions detailed in your engine manual, generator manual and in the filter literature).

#### Fuel Quality

- Make sure your diesel fuel suppliers are reputable and can be relied upon to furnish clean, high quality fuel. Once you have found such suppliers, keep your tank as full as possible with their fuel, allowing for expansion due to temperature variations. Then, if you are forced to add to the tank with a potentially poor quality supply, the portion of poor quality fuel will be minimized.
- Ask your dealer or local marina about fuel additives that help prevent fungus growth or buildup in your tanks.

### Freshwater System

- The water tank fill fittings are located on the port and starboard side decks. The city water inlet is located on the starboard side of the aft cockpit.
- A pressure accumulator tank is installed in the freshwater system. The pressure accumulator tank assists the pressure pump by reducing on/off cycling and distributing an even flow of water.
- When your boat is to be left unattended for long periods of time, pump the water tanks dry to prevent stored water from becoming stagnant and distasteful. Should it become necessary to disinfect the freshwater system, ask your dealer about treatments available for your yacht's system.



- The water filter, located in the engine room near the water pump, should be inspected and cleaned often.
- o The water level monitor, located on the DC panel, displays the amount of water in both of the water tanks simultaneously. To check water level, on the DC panel: Make sure the water tank monitor breaker is activated then press the water tank momentary switch.

## NOTICE

The water level monitor may not be 100% accurate, so you should fill the water tanks at every opportunity to avoid running short of freshwater.

- When not connected to a dockside water supply, the water pump's DC breaker must be activated to use freshwater.
- The water pump's breaker on the DC panel should be turned off when any of the following occurs:
  - ✓ When the boat is not in use

- ✓ Before pumping water tanks dry
- √ When one of both water tanks are empty

When connected to a dockside water supply

#### Water Heater

Your yacht is equipped with a 20 gallon water heater, which can be accessed through the master stateroom head's storage locker. Since the water heater is connected to the AC power system, you must verify that the water heater breaker on the AC panel is turned *on* before the water will be heated. Please read the manufacturer's instruction manual supplied in your yacht's owner's packet and observe the following warnings:

## N WARRING



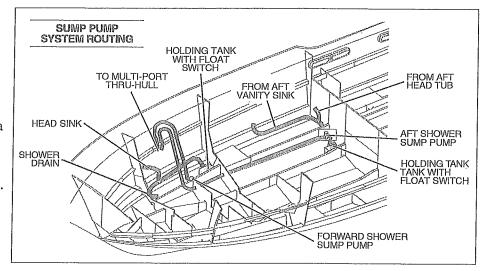
 $SCALDING\ HAZARD!$  Water heated by the water heater can reach temperatures high enough to scald the skin.

## A CAUTION!

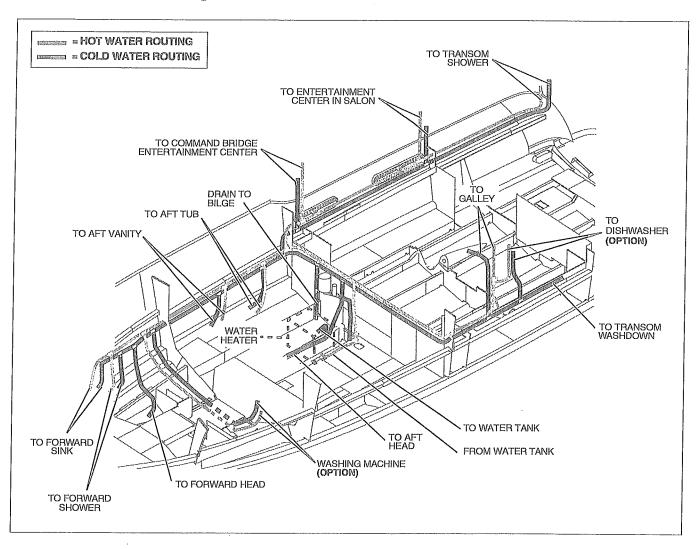
- WATER HEATER DAMAGE HAZARD! Do not energize the AC water heater electrical circuit until the heater is completely filled with water. Even momentary operation in a dry tank will damage the heating elements. Warranty replacements will not be made on elements or tank damaged in this manner.
- Water heaters should be drained (power turned off) when the possibility of freezing exists.

#### Gray Water Drain System

- Gray water (water from sinks and showers) above the waterline is gravity drained overboard, while gray water below the waterline is drained into a holding tank.
- When the holding tank reaches a predetermined level, the tank's float switch automatically activates the sump pump to empty the tank's gray water overboard.
- The shower sump pump can be accessed through the cutout in the hallway at the bottom of the stairs leading to the stateroom.



Hot & Cold Water Routing



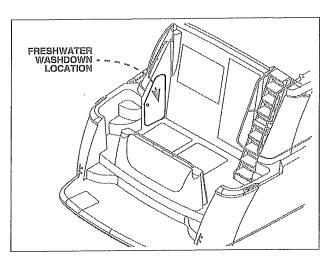
#### Freshwater Washdown

The faucet for the freshwater washdown is located on the port side of the cockpit.

#### Seawater System

#### Seawater Strainers

Seawater strainers are used in water pickup systems to filter incoming seawater. The seawater strainers, located in the engine room and generator compartment, should be checked regularly for leaks and/or debris. The typical layout is one strainer for each of the following: Engine, raw water washdown (on washdown system's pump), generator, optional water maker and optional air conditioning/heating systems.



#### Cleaning a seawater strainer:

- 1. Make sure the component/system (engine, generator, etc.) that the strainer is connected to is turned off.
- 2. Close the seacock that sends water to the strainer you are about to clean. The seacock *must* remain closed until the strainer is completely reassembled.
- 3. Take apart the seawater strainer and remove debris.
- 4. Reassemble the seawater strainer.
- 5. Open the seacock before turning on the component/system.

## CAUTION!

The seacock sending water to the seawater strainer must be *closed* before disassembling the seawater strainer to prevent the yacht from taking on water through the seawater strainer assembly. Keep the seacock *closed* until the seawater strainer is completely reassembled.

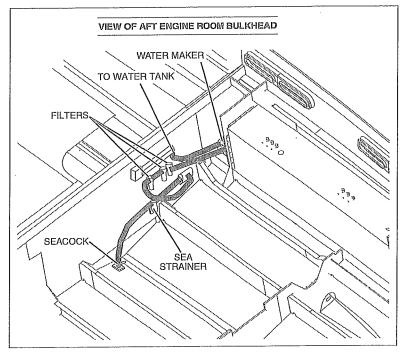
## ♠ CAUTION!

SYSTEM DAMAGE HAZARD! After reassembling the seawater strainer, verify that the seacock valve is open before component/system operation.

#### Water Maker (Option)

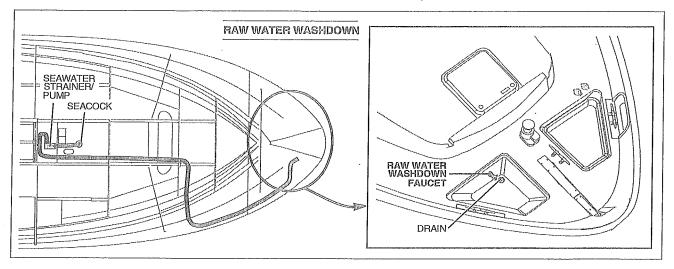
Your yacht may feature an optional water maker (reverse osmosis desalinator), which converts seawater to freshwater.

- The watermaker is located in the engine room on the aft bulkhead.
- To learn more about the water maker system, we encourage you to read the water maker's operation manual included in your yacht's owner's packet.



#### Raw Water Washdown

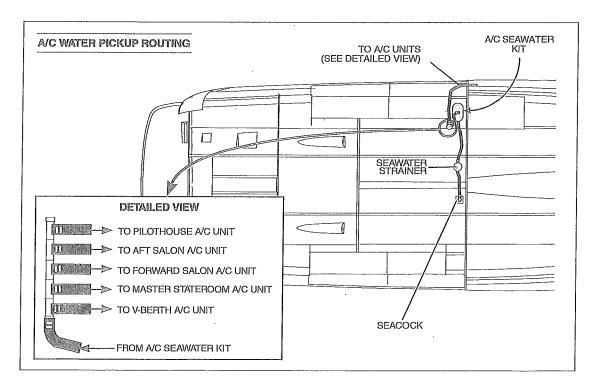
The outlet for the raw water (seawater) washdown system is located on starboard side of the forward deck. Always make sure the seacock is open before turning the raw water washdown system on.



### Air Conditioner & Heater (Option)

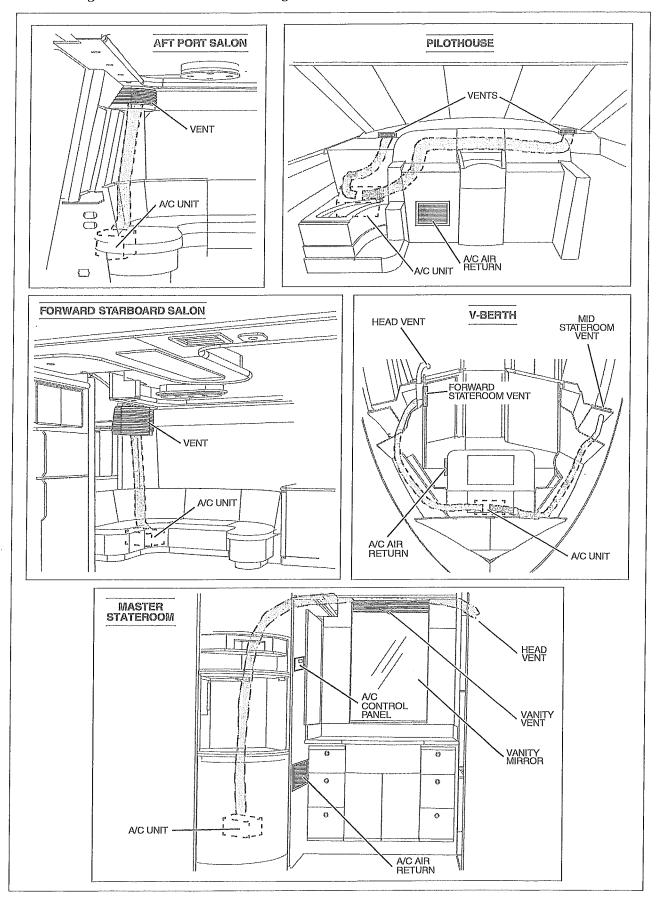
Your yacht may be equipped with an optional air conditioning (A/C) and heating system.

- Both heating and cooling are controlled from the same panel.
- Before operating the air conditioning and heating unit, make sure the breakers on the AC panel are activated
- Make sure the A/C system's seacock is open before using the air conditioning/heating system. The seacock *must* remain open anytime the air conditioner/heater is in use.
- For further operating instructions, please read the air conditioner and heater manual included in your yacht's owner's packet.

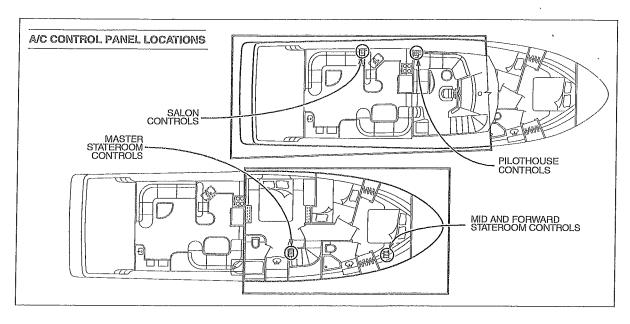


## BALLINER®

#### Air Conditioning Unit Locations & Duct Routing



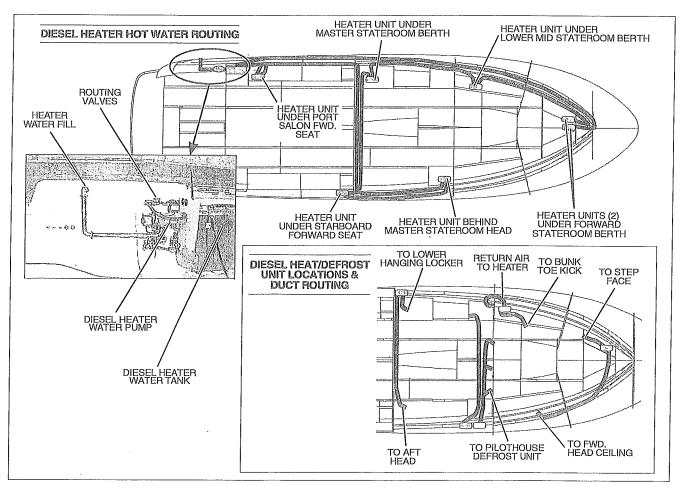
## Air Conditioning Control Panel Locations



# Diesel Heater & Defroster (Option)

Your yacht may be equipped with an optional diesel heater and defrosting system. Operating instructions for this system can be found in the manufacturer's instruction manual included in your yacht's owner's packet

## Diesel Heat/Defrost System Routing



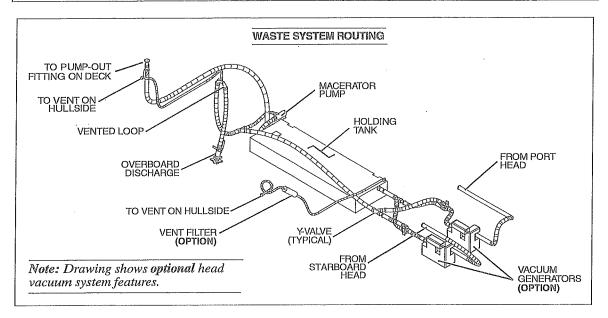
## Marine Head System & Holding Tank

Each head (toilet) comes with its own instruction manual. Please refer to this manual for detailed information and winterizing recommendations regarding your yacht's head system.

- The marine head system installed on your yacht is designed so that waste from each head may be flushed into the holding tank or pumped overboard (where regulations permit). Routing is decided by the setting of each head's Y-valve. Access to the head Y-valves is through the hallway floor cutout, at the bottom of the forward stairs.
- The holding tank can be emptied by dockside pump-out or, where permitted, by actuating the macerator pump from the pilothouse DC panel. The holding tank is located under the master stateroom and can be accessed through the cutouts in the closet floor.
- The holding tank features a level indicator, located on the DC panel. We recommend emptying the tank at every opportunity.
- Your yacht may feature an optional vacuum head system which includes two vacuum generators and an additional tank filter (see drawing below).

## NOTICE

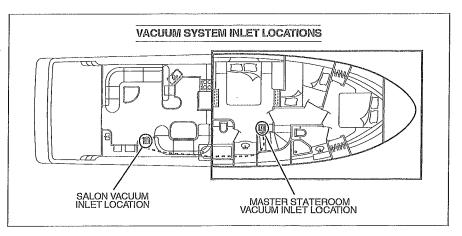
Check local regulations regarding the legal use of marine head systems in your area.



# Vacuum System

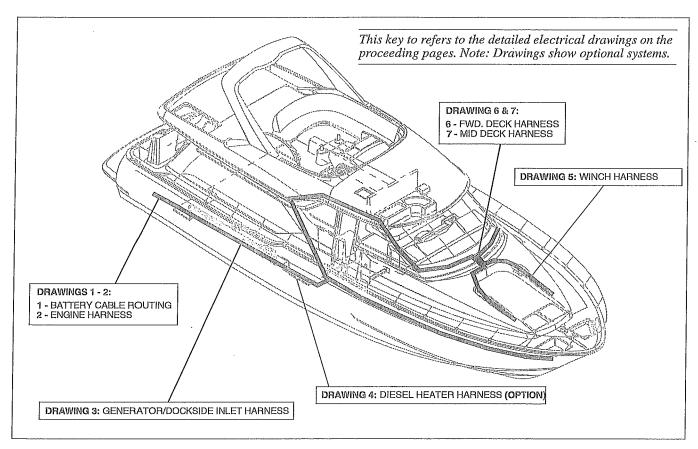
Your yacht features a built-in vacuum system. The vacuum hose receptacles are conveniently located inside the starboard salon cabinet (aft of the galley) and in the master stateroom's starboard TV cabinet.

- Before attempting to operate the vacuum, make sure the breaker switch on the AC master panel is turned on.
- Refer to the vacuum operation manual included in your yacht's owner's packet for further instructions.

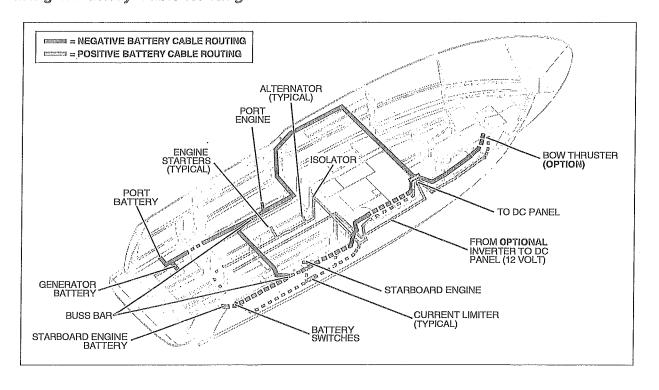


# APPENDIX A: ELECTRICAL ROUTING

## Routing Key

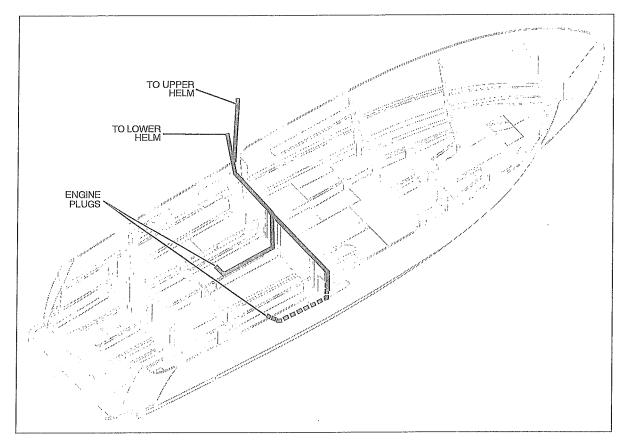


Drawing 1: Battery Cable Routing

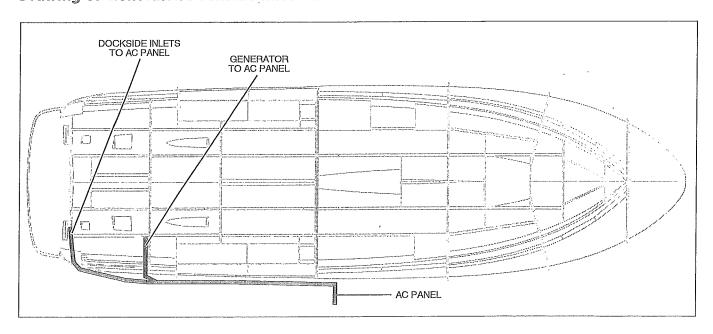




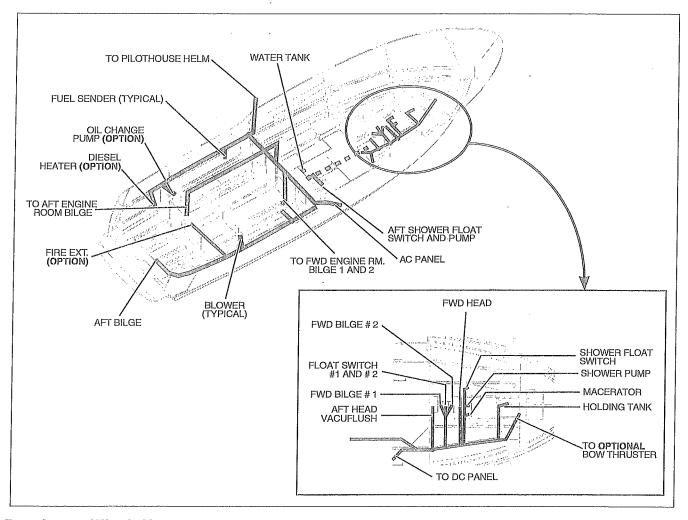
Drawing 2: Engine Harness



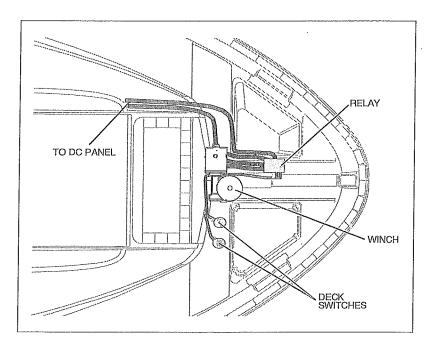
Drawing 3: Generator/Dockside Inlet Harness



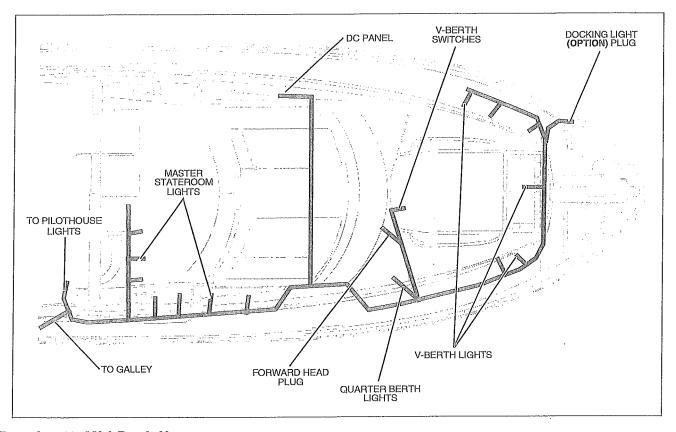
Drawing 4: Diesel Heater Harness (Option)



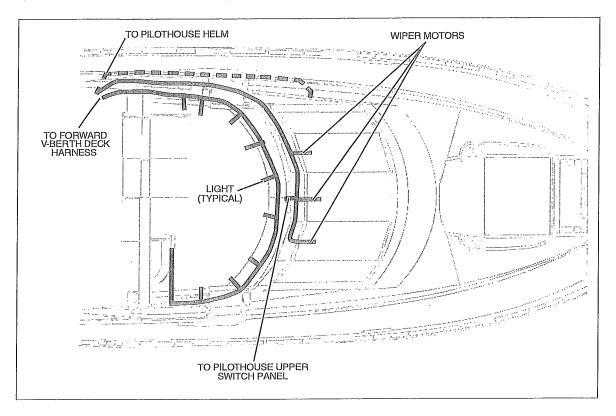
Drawing 5: Winch Harness



Drawing 6: Forward Deck Harness



Drawing 7: Mid Deck Harness



# APPENDIX B: WIRING SCHEMATICS

## Electrical Symbol Key

Symbol	Description	Symbol	Description
+	Connection (Node)	ww.	Fuel Sender
+	No Connection	A	Bulb
⊕⊖	Battery		Lamp
+	Earth Ground: Represents a black conductor that is the same size as the colored conductor	李	Diode
(A)	Ammeter	$\bigcirc$	12V DC Receptacle
E	Frequency Meter	V	Voltmeter
	Plug	M	Motor/Pump
0 0	Breaker		Current Transformer
þ	Breaker	000	Gauge
0	Fuse	Ä	Speaker/Horn/Alarm
0	Switch: Single Pole Single Throw (SPST)	~	Float Switch
0	Switch: Double Pole Single Throw (DPST)	-ol	Lighted Switch: Single Pole Single Throw (SPST)

## Wire Color Key

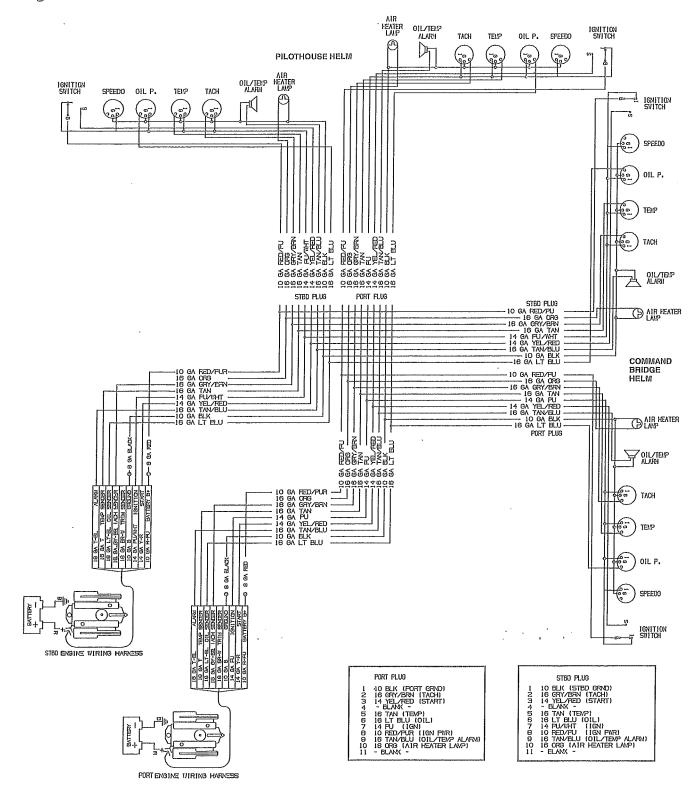
Color Key	Description	Color Key	Description
BLK or B	Black	BL or BLU	Blue
BR or BRN	Brown	DK	Dark
DK	Dark	GY or GRY	Gray
G, GR or GRN	Green	LT	Light
O or ORG	Orange	PK	Pink
PU, PUR or PPL	Purple	R or RED	Red
T or TAN	Tan	W, WH or WHT	White
Y or YEL	Yellow		

# NOTICE

- Wiring diagrams may show optional equipment not installed on all models.
- Some yachts may come equipped with silver (-) and copper (+) colored speaker wires or red/black (-) and red/white (+) port speaker wire colors; green/black (-) and green/white (+) starboard speaker wire colors.

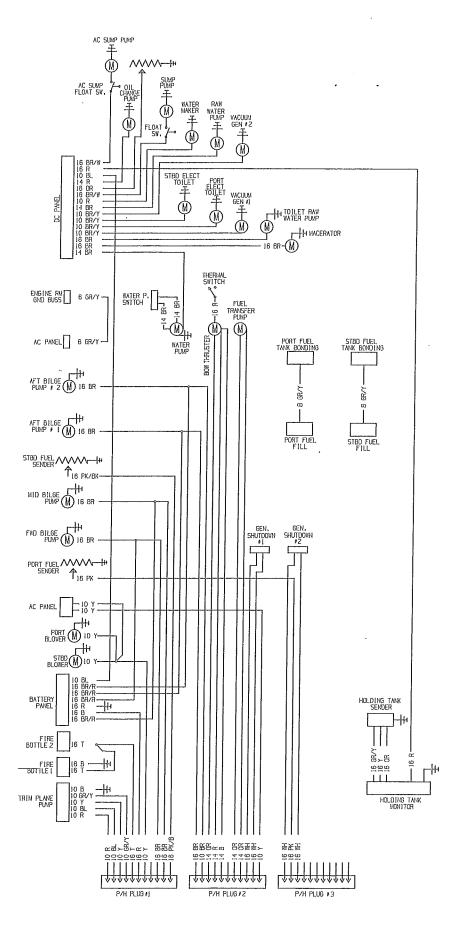
## GRULINER°

### Engine Harness



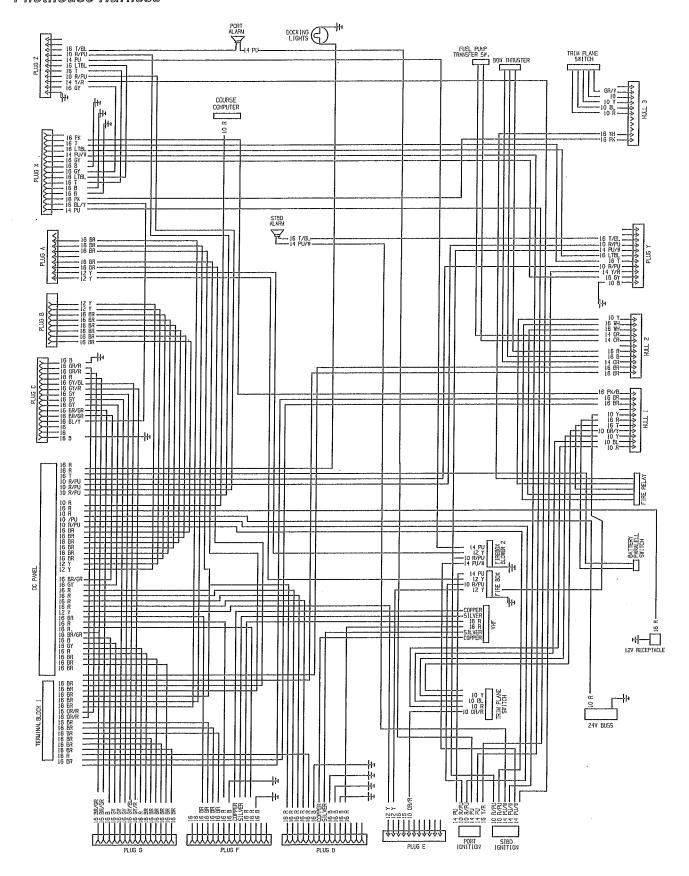
## Hull Harness

40

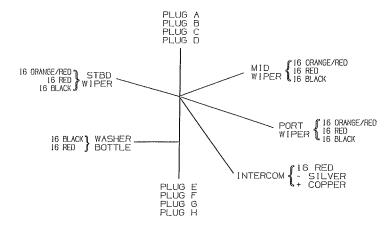




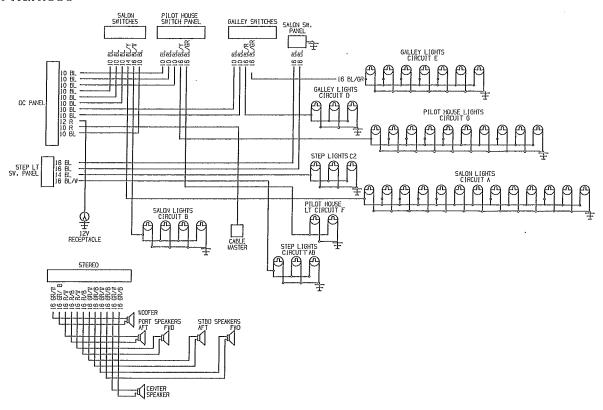
#### Pilothouse Harness



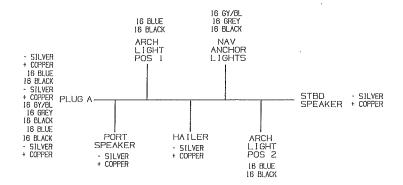
## Pilothouse Connector



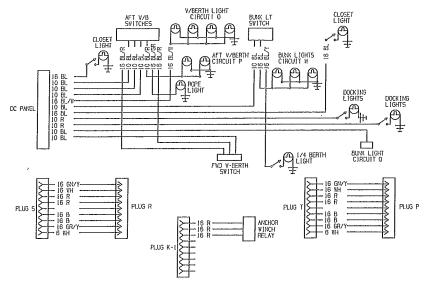
#### Salon Harness



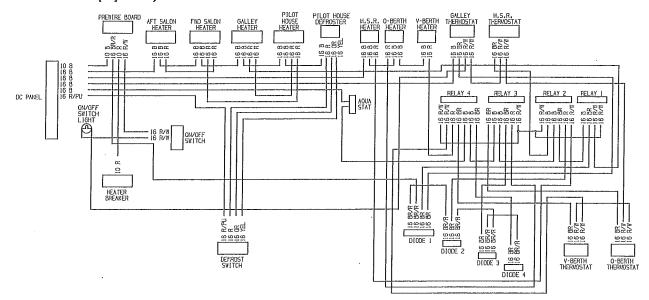
#### Arch Harness



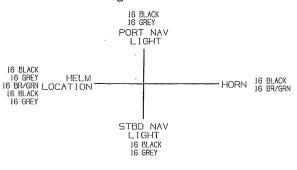
#### V-Berth Harness



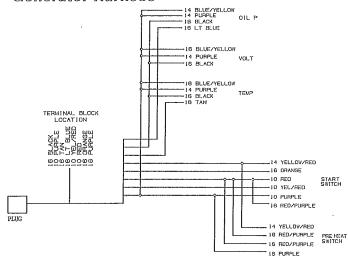
## Diesel Heater (Option)



## Command Bridge Harness



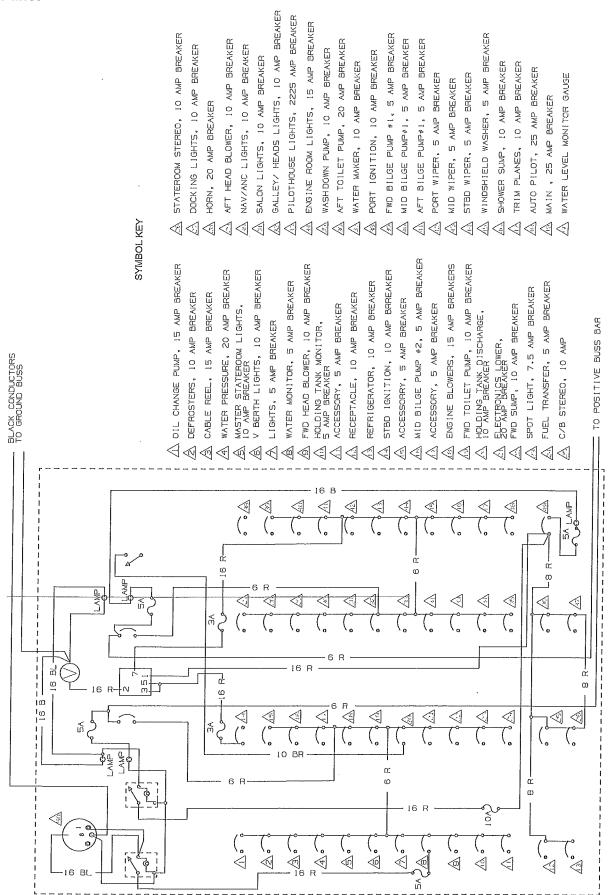
## Generator Harness



5788 Motoryacht o Owner's Manual Supplement

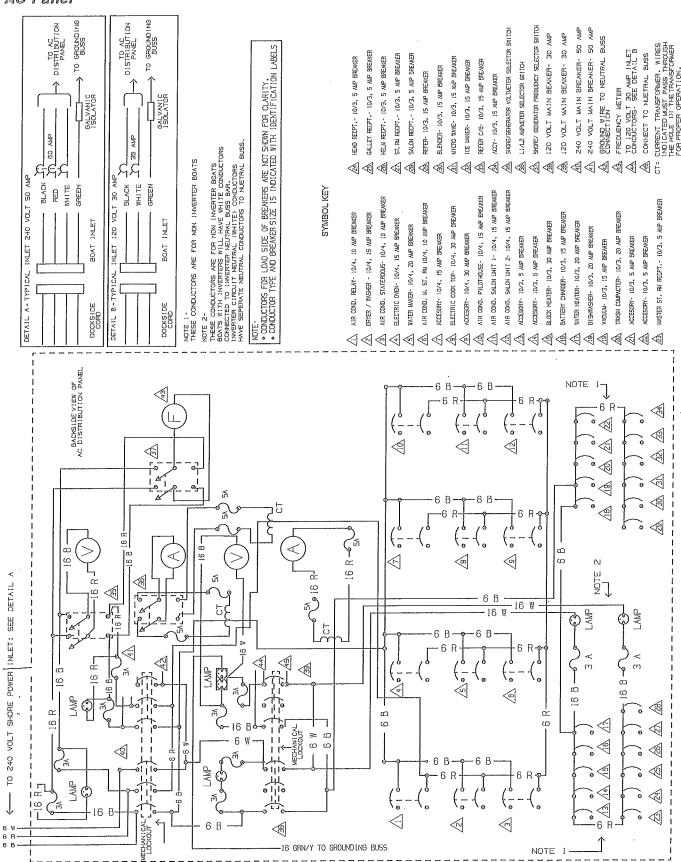
#### DC Panel

44

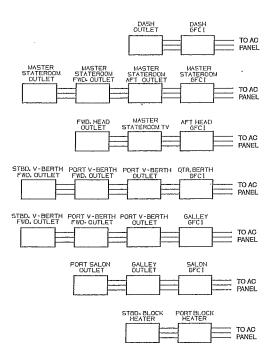


## BREILIVER®

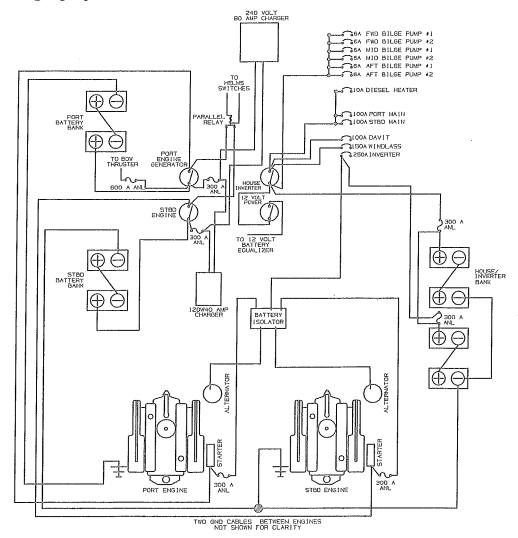
#### AC Panel



## Receptacle Circuits



Battery & Charging System



# APPENDIX C: ISO SYMBOLS

These ISO (International Organization for Standardization) symbols may be used throughout your boat, the *Owner's Manual Supplement* to identify and describe various systems and components.

	Description		Description		Description
介出	Air Cooled Charge Air Cooler		Air, General	$\Rightarrow$	Air, Intake (For Combustion)
t	Anchor	5	Blower	-0-	Compass
	Counterclockwise Rotation	kWd	Crankshaft Power		Disengage
	Elapsed Time	(7)	Electric Generator	60	Electrical Preheat for Diesel Engine
	Engage	0	Engine	3	Engine Air Intake
	Engine Coolant	6	Engine Exhaust Gas		Engine Exhaust Gas Pressure
61	Engine Exhaust Gas Temperature		Engine Inlet Air Filter	4	Engine Inlet Air Pressure
31	Engine Inlet Air Temperature	0	Engine Oil		Engine Oil Filter
<b>₽</b>	Engine Oil Level	\$ \$ \$	Engine Oil Pressure		Engine Oil Temperature
(r/min)	Engine Rotation Speed, R/MIN		Engine Start		Engine Water Jacket Drain
	Exhaust Gas		Filter	222	Freshwater
<b>1</b>	Freshwater Cooled Charged Air		Freshwater Tank		Fuel, Diesel
B	Fuel Filter		Fuel General		Fuel Level
LPG	Fuel, Liquid Propane Gas	Bl	Fuel Shut Off		Fuel Tank, Diesel
LPG	Fuel Tank, LPG	<b>6</b>	Fuel Tank, Unleaded		Fuel, Unleaded
	Heat Exchanger	٨٠٠٨	Holding Tank		Horn



	Description	11.0	Description	17	Description
$\Diamond$	Hydraulic Oil		Hydraulic Oil Filter		Hydraulic Oil Level
⇒ <b>○</b> ¢	Hydraulic Oil Pressure		Hydraulic Oil Temperature		Hydraulic System
9	Hydraulic System Malfunction	\ \times	Interior Light		Lift Point
-\$	Light	$\Diamond$	Lubricating Oil	0	Malfunction
	No Open Flame		Oil Tank		Outboard Drive
19	Outboard Drive Tilt	<b>₽</b> • <b>₽</b>	Pressure	R	Propeller
16WCF	Propshaft Power	Û	Propulsion System Trim	1	Propulsion System Trim, Bow Down
Û	Propulsion System Trim, Bow Up	5	Pump	Ш	Read Owner's Manual
LLL	Seawater	<b>1</b>	Shift Only Fwd-N-Rev		Sling Location
	Tank	Ä	Throttle/Shift		Transmission
	Transmission Oil		Transmission Oil Filter	PLO).	Transmission Oil Level
	Transmission Oil Malfunction	4 0	Transmission Oil Pressure		Transmission Oil Temperature
1	Trim Tab Operation	<b>₽</b>	Trim Tab Operation, Bow Down	Û~	Trim Tab Operation, Bow Up
	Volume Empty		Volume Full		Volume Half Full
	Warning	B	Warning Electrical Hazard		Warning Fire Risk
	Warning Hot	,,,,	Waste Water, Sewage		Water Flushing Connector
	Windshield Washer Tank		Windshield Wiper & Washer		

# APPENDIX D: LIMITED WARRANTY

Bayliner warrants to the original purchasers of its 1999 and 2000 model boats, purchased from an authorized dealer, operated under normal, noncommercial use that the selling dealer will: (A) Repair any structural hull defect which occurs within five (5) years of the date of delivery; and (B) Repair or replace any parts found to be defective in factory material or workmanship within one (1) year of the date of delivery.

#### What Is Not Covered

This limited warranty does not apply to:

- 1. Engines, drive trains, controls, props, batteries, or other equipment or accessories carrying their own individual warranties;
- 2. Engines, parts or accessories not installed by Bayliner;
- 3. Plexiglass windscreen breakage; rainwater leakage on runabout models; rainwater leakage through convertible tops; minor gelcoat discoloration, cracks or crazing or air voids;
- 4. Hull blisters that form below the waterline;
- 5. Normal deterioration, i.e. wear, tear, or corrosion of hardware, vinyl, tops, vinyl and fabric upholstery, plastic, metal, wood, or trim tape;
- 6. Any Bayliner boat used for commercial purposes;
- 7. Any defect caused by failure of the customer to provide reasonable care and maintenance.

#### Other Limitations

THERE ARE NO OTHER EXPRESS WARRANTIES ON THIS BOAT. TO THE EXTENT ALLOWED BY LAW:

- 1. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF ONE YEAR.
- 2. Neither Bayliner nor the selling dealer shall have any responsibility for loss of use of the boat, loss of time, inconvenience, commercial loss or consequential damages.
- 3. Some jurisdictions do not allow limitations on how long any implied warranty lasts, so the above limitation may not apply to you. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

### Your Obligation

In order to comply with regulations, it is essential that your limited warranty registration card be submitted within 30 days of delivery of your boat. Return of the limited warranty registration card is a condition precedent to limited warranty coverage. Before any warranty work is performed, we require that you contact your dealer to request warranty assistance.

YOU MUST GIVE US WRITTEN NOTICE OF YOUR WARRANTY CLAIM PRIOR TO THE EXPIRATION OF YOUR LIMITED WARRANTY AND ALLOW US AN OPPORTUNITY TO RESOLVE THE MATTER.

We require that you return your boat, at your expense, to your selling dealer or, if necessary, to the Bayliner factory. You will be responsible for all transportation, haulouts and other expenses incurred in returning the boat for warranty service.

**Bayliner Marine Corporation** 

PO Box 9029 Everett, WA 98206

Phone: 360-435-8957 FAX: 360-403-4235

# Owner's Notes

•					
F					
					···
		· · · · · · · · · · · · · · · · · · ·			
-					
	·				
			Tavvit-111		71.4.7.
		*******			
				7.111	
		-	***		
40.					
	40,000				
-				•	
			11.75		
				The state of the s	