BRYLINER 4550 PILOTHOUSE MOTORYACHT

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CONTENTS

WELCOME ABOARD	1												
PREPARATION													
Safety Equipment	5 5												
OPERATING													
Pre-Start Inspection. Starting Procedure. Engine Idling Inspection. New Engine Break-in Before You Leave. Maneuvering. Boat Performance. Boat Running Attitude Trim Tabs. Dual Station Operation. Cabin Limits.													
COMPONENTS/SYSTEMS													
Electrical System110 Volt A.C. Diesel Generator. Hot Water Heater. Air Conditioning/Heating. Fuel System Shaft-Transmission Alignment. Shaft Log Stuffing Box Packing. Rudder Stuffing Gland Stove Steering. Spotlight Refrigerator. Seawater Strainers. Exhaust System. Potable Water System. Marine Head System. Bilge Pumps	14 15 16 16 17 18 19 19 20 20 20 21 21 21 22												

CONTENTS

GENERAL MAINTENANCE AND REPAI	GENERAL.	MATNIFNANCE	CIMA	REPATRS
-------------------------------	----------	-------------	------	---------

	Bilo	jes	3/E	иõ	jir	ıe	α	zmŗ	aı	ctn	ner	ıt.	0	•	•	0	0	•			•	۰	•	۰	0		•	0	23
	Cabi	.n	ar	nd	Tc	ps	sic	le	Αı	cea	as	٥	•	٥	•	•	۰	٠				•	•		•	•		9	23
	Hull	. •		•	•	۰	٠	۰	•	٠	٠	•	•	•	•	•	•	٠	٠	•	•	•	•	•	•	٠	٠	o	25
STOR	AGE.	•	0	•	•	•	•	•	•	۰	•	•		•	•	٥	٠	٠	•	•	•	•	•	٠	•	•	•	•	28
WARR	WIY	•	•	•	•		•	•	•	•		•	•	•	•		•	•		•	•	•	•		•	•	•	•	29
NAULI	[CAL	Tī	TRê-	s	•	•	•	•		•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	30
ILLUS	STRAT	ı	NS.	;.	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•			•		31
TATISTE	P																												4.4

This manual has been specially prepared to assist you in the operation and care of your Bayliner 4550 Pilothouse Motoryacht. While not intended as an all-inclusive document designed to provide every detail, familiarization with this manual will contribute to the more effective operation of your yacht. In addition, to further assure your boating enjoyment and safety, make certain that you get a full explanation of all systems from your dealer and review the literature supplied with your owner's information packet.

When your boat requires service, we suggest you contact your Bayliner dealer. The dealer knows your boat better than any service center and is in the best position to provide qualified service. We are pleased that you have selected a Bayliner Motoryacht and know that her unique design will provide you with outstanding performance and many years of boating pleasure.

Prior to leaving on your first outing (or, for that matter, any outing) there are certain items to check and activities to perform. Besides reading this manual and your engine manual, familiarize yourself with your boat while dockside, and consider the following.

RECOMMENDATIONS FOR SAFETY

1. Personal Flotation Devices:

One Coast Guard approved personal flotation device (PFD) of suitable size is required for each person aboard recreational boats, including sailboats, rowboats, kayaks and canoes. New PFD's bearing Coast Guard approval are now identified by "Types I, II, III, or IV".

Boats sixteen feet (16') or over in length: One (1) Type I, II, or III (wearable) for each person on board and one (1) type IV (throwable) in each boat.

- 2. Always have children wear lifesaving devices. Always check those devices intended for young children for fit and performance in the water. Never hesitate to have "all hands" wear lifesaving devices whenever circumstances cause the slightest doubt about safety.
- 3. Do not overload or improperly load your boat. Maintain adequate freeboard at all times. Consider the sea conditions, the duration of the trip, the weather and the experience of the personnel. Do not permit persons to ride on parts of the boat that were not designed for such use. Bow riding and seat back or gunwale riding can be especially hazardous.
- 4. Falls are the greatest cause of injury both afloat and ashore. Eliminate tripping hazards where possible, make conspicuous those that must remain, and require proper footwear to be used on board.
- 5. Know the meaning of the buoys. Never moor to one, it is a Federal offense.
- 6. Know the various distress signals. A recognized distress signal used on small boats is to slowly and repeatedly raise and lower the arms out stretched to each side.
- 7. Storm signals are for your information and safety. Learn them and be guided accordingly.
- 8. A special flag (red flag with white diagonal) flown from a boat or buoy means skin diving operations. Approach with caution and stay clear at least 25 yards.
- 9. Be especially careful when operating in any area where there might be swimmers.
- 10. Watch your wake. It might capsize a small craft. You are responsible for damage caused by your wake. Pass through anchorages at a minimum speed.

RECOMMENDATIONS FOR SAFETY (Cont'd)

- 11. Obey the rules of the road. Disregard of such rules is the greatest cause of boating collisions.
- 12. Always have an up-to-date charts of your area on board.
- 13. Keep an alert lookout. Serious accidents have resulted from failure in this respect.
- 14. Always instruct at least one person on board in the rudiments of boat handling in case you are disabled or fall overboard.
- 15. Consider what action you would take under various emergency conditions such as man overboard, fog, fire, a stove-in hull or other bad leaks, motor breakdown, bad storm, or collision.
- 16. If you ever capsize, remember that if the boat continues to float it is usually best to remain with it. You are more easily located by a search plane or boat.
- 17. Keep firefighting and lifesaving equipment in good condition and readily available at all times.
- 18. Do not test fire extinguishers by squirting small amounts of the agent. The extinguisher might not work when needed. Always follow approved instructions in checking fire extinguishers.
- 19. Have an adequate anchor and sufficient line to assure good holding in a blow (at least six times depth of water).
- 20. Boat hooks are not required equipment but they are valuable when mooring or when needed to retrieve pets, preservers (and people) over the side.
- 21. Keep electrical equipment and wiring in good condition. No knife switches or other arcing devices should be owner installed in fuel compartments. Allow ample ventilation around batteries.
- 22. Good housekeeping is even more important afloat than ashore. Cleanliness diminishes the probability of fire.
- 23. Know your fuel tank capacity and cruising range. If it is necessary to carry additional fuel, do so only in proper containers.
- 24. Before departing on a boat trip, you should advise a responsible friend or relative about where you intend to cruise. Be sure that the person has a good description of your boat. Keep him advised of any changes in your cruise plans. By doing these things, your friend or relative will be able to tell the Coast Guard where to search for you and what type of boat to look for if you fail to return. Be sure to advise the same person when you arrive to prevent any false alarms about your safety.

RECOMMENDATIONS FOR SAFETY (Cont'd)

25. Your local U.S. Coast Quard Auxiliary/Power Squadron generally puts on a Safe Boating Class several times a year. They are very comprehensive and generally of minimal cost to you. Call your local U.S. Coast Quard Auxiliary or Power Squadron Flotilla for the time and place of the next class.

SAFETY EQUIPMENT

The following safety related items should be considered as part of your standard equipment:

- 1. Fire extinguisher (more than one--located for easy access).
- 2. Personal flotation devices.
- 3. Fenders, and lines, and boat hook.
- 4. Flares (night and day type).
- 5. Flashlight.
- 6. Charts of intended cruising area.
- 7. First aid kit.

TOOL CHEST

- Assorted screwdrivers (phillips and flat blade).
- Pliers--regular, vice-grip, and water pump.
- 3. Wrenches--box, open-end, allen, and adjustable.
- 4. Socket set (metric and U.S. standards).
- 5. Hacksaw with spare blades.
- 6. Hammer.
- 7. Battery jumper cables.
- 8. Electrical tape.
- 9. Assorted fasteners.
- 10. Gear grease and penetrating oil.
- 11. Feeler gauges.

MISCELLANEOUS ITEMS

- 1. Engine and accessories manual.
- 2. Propeller with fastening devices.
- 3. Propeller shaft packing material.
- 4. Spare shaft and strut.
- 5. V-belts.
- 6. Engine lubricating oil.
- 7. Transmission Lubricant.
- 8. Fuel and oil filters.
- 9. Cooling pump impellers.
- 10. Fuel Can.
- 11. Light bulbs.
- 12. Spare set of injectors for one engine (remote area cruising).

STATIC FLOAT ATTITUDE

The static attitude of your boat can be affected by many variables. Optional equipment and loading of gear are the biggest contributors to a boat's listing. After launching, any new boat can be adjusted. If your boat lists to one side, store heavy items on the light side and light items on the heavy side.

OTHER TIPS

- 1. When commissioning a new boat, do not plan an extensive trip or party until you have a shakedown cruise to make sure all equipment on your boat is functioning properly and you are familiar with its operation.
- 2. Use big bumpers and fender boards as they will best protect your boat from floats, piers, and other boats.
- 3. Carry adequate line properly sized to your boat. We suggest at least four 60' lengths of 5/8'' nylon line.

FUELING PROCEDURES

The following procedures apply primarily to gasoline engine powered boats. However, by learning and using these steps, an extra margin of safety will be realized when fueling your Bayliner Yacht equipped with U.S. Marine diesel engines.

- 1. Be sure that you are securely moored to the dock.
- 2. Turn off all equipment including engines, generator, appliances, bilge blower, lights, etc.
- 3. Extinguish all cigarettes, cigars, or other items that may produce a spark or flame.
- 4. Close all openings including hatches, windows, doors, and portlights.
- 5. Through-deck fittings for fuel tank filling are found on both port and starboard sides approximately midway between the bow and stern and are labeled "diesel". Remove cap and insert fuel supply nozzle, allowing the nozzle to maintain contact with the fitting--thereby preventing possible static sparking.
- 6. Add fuel to both tanks. Do not fill to the point of overflow; however, tanks should be kept as full as practical to minimize condensation and accumulation of moisture in the fuel system.
- 7. Replace the fill cap and wash and wipe off any fuel spillage.
- 8. Open engine hatches and windows, doors, etc., and inspect, visually and by smell, for fuel fumes or leakage. Operate bilge blower for four minutes prior to starting engines and casting off. Leave blower on until underway and at cruising speed.

PRE-START INSPECTION

An operating and maintenance manual for your diesel engines is included with each Bayliner Motoryacht. Prior to initial operation, you should carefully read the contents of that manual.

Before starting engine, check the following:

- 1. Engine oil level.
- 2. Coolant level.

WARNING! THE HEAT EXCHANGER CAP SHOULD NOT BE REMOVED WHILE THE ENGINE AND COOLING SYSTEM ARE HOT.

- 3. Transmission oil level.
- 4. Check that fuel supply valve is open.

PRE-START INSPECTION (Cont'd)

- 5. Check that seawater intake valve (Seacock) is open.
- 6. Water separators -- visual check for moisture or contamination.
- 7. Seawater strainers -- visual check for debris.
- 8. V-belt tension.
- 9. Visual check for indications of fuel, oil, coolant, and exhaust leaks.

STARTING PROCEDURE

- 1. Turn the battery switch on (cabinet; aft end, starboard side of salon).
- 2. Place the transmission selector lever in the neutral ("N") position.
- 3. Position the throttle control in the "Start" position.
- 4. Turn on D.C. ignition breaker switches (pilothouse level).
- 5. For low temperature start (below 14°F/-10°C), use the pre-heater system. Push button and hold in for 15-30 seconds (do not exceed 30 seconds).
- 6. Turn the ignition key clockwise to start engine.
 - WARNING: DO NOT CONTINUOUSLY OPERATE THE STARTER FOR MORE THAN 15 SECONDS AT A TIME.
- 7. If the engine does not start, wait at least 30 seconds before another attempt. If after two attempts the engine does not start, try to determine the cause before proceeding.
- 8. A warning light and/or buzzer will activate when key is turned on. IF THESE WARNINGS DO NOT CEASE WITHIN A FEW SECONDS AFTER START-UP, TURN ENGINE OFF AND INVESTIGATE BEFORE RE-START.
- 9. When engine starts, release the key and allow it to automatically return to the running position.
 - WARNING! DO NOT USE ETHER OR STARTING FLUID FOR STARTING AID AS THIS MAY RESULT IN A FIRE OR EXPLOSION.
- 10. Do not race or allow the engine RPM to exceed slow speed (750-1200 RPM) until it is warmed up.

ENGINE IDLING INSPECTION

1. As engine is warming up:

ENGINE IDLING INSPECTION (Cont'd)

- Check that oil pressure reading is at least 40 PSI. IMMEDIATELY stop the engine if low oil pressure is indicated and determine the cause prior to re-start.
- Observe exhaust outlets to verify cooling water discharge.
- 2. Allow engine to warm up 5-10 minutes. With idle speed at approximately 1000 RPM, check the following:
 - Oil Pressure 40 PSI or higher
 - Water temperature . . 135°-180°F
 - Woltage meter 12-15.5 Wolts
 - Fuel gauge Sufficient fuel
 - Exhaust gas Should be colorless or light blue. Also there should be water out-flow with exhaust indicating cooling water circulation.
- 3. Prior to closing the hatch, check for liquid and exhaust leaks, and remove tools, gloves, rags, etc. from on and around engine.
- 4. While the boat is still securely moored to the dock, individually advance each shift control to forward, to reverse, and into neutral to check shifting operation.
- 5. Turn the steering wheel full port and starboard to check that the "feel" indicates proper operation.

NEW ENGINE BREAK-IN

All engines are test run prior to delivery. Nevertheless, it is extremely **IMPORTANT** to follow break-in procedures to insure many years of economical and trouble free operation.

- During first 5 hours of operation, do not exceed an engine speed of 2500 RPM.
- 2. From 5 to 30 hours of operation, do not run at full throttle speed for more than 5 minutes.
- 3. During first 30 hours, it is recommended that the engine is neither idled nor operated at a single RPM setting for extended periods.

BEFORE YOU LEAVE

Before you leave the dock consider the following in addition to instructions under "Starting Procedures":

BEFORE YOU LEAVE (Cont'd)

- 1. Check fluid levels in generator.
- 2. Check the operation of the more essential equipment such as bilge pumps, running lights, wipers, water system, etc.
- 3. Instruct passengers in the use and location of flotation devices and fire extinguishers.
- 4. Fill fresh water tanks.
- 5. Obtain a reliable weather forecast and plan accordingly for comfort and safety.
- 6. Notify a responsible friend, relative, marine operator, or Coast Guard of your cruise plans. Upon your return or should your cruise schedule change, notify that person in order to avoid unnecessary concern.

MANEUVERING

With all your pre-departure checks now completed, you are ready to leave the dock.

1. Basic Maneuvering

Remember that all boats steer by the stern (the feeling is much like steering your automobile in reverse). For example, when you turn the steering wheel to the left, the stern of the boat will swing to the right as the boat goes into a left turn. This is especially important to keep in mind when docking and operating in close quarters with other boats.

There are no brakes on a boat. Stopping is accomplished by allowing the boat to slow down (under 5 m.p.h.) and then putting the engine in reverse. Gently increasing reverse power will allow you to stop the boat in a very short distance. A boat does not respond to steering in reverse nearly as well as it does when going forward, so do not rely on being able to accomplish tight turning maneuvers when backing up.

Your boat has twin propellers rotating in opposite directions in order to balance the torque. You can engage one engine in forward gear, and the other in reverse gear and turn the boat completely around in its own length if the rudder is left in the center position. You can, of course, make such a turn in either direction. Port engine forward and starboard engine in reverse spins you clockwise. Starboard engine forward and port engine in reverse spins you counter-clockwise. You can accentuate the spin by full rudder in the spin's direction.

Once you are away from the dock, devote some time to learning how to maneuver.

Practice docking by using an imaginary dock.

MANEUVERING (Cont'd)

1. Basic Maneuvering (Cont'd)

- Practice stopping.
- Remember your boat is heavy. When operating in close quarters or docking, all maneuvering should be done at idle speed. Proceed with caution in congested areas.
- Gradually increase your speed. Get used to the boat before any full throttle operation.

2. Docking

- Preparation:

Proper docking begins with proper preparation. Start by making sure you have adequate equipment, and that it is stowed correctly and ready for use. Your dealer is the best source for the amount and type of equipment you should carry.

- Approaching the Dock:

When approaching a mooring area, lower your speed within a reasonable distance to allow your wake to subside before it reaches other boats or docks. As you get close to your moorage check the wind and any tide current action that may affect your maneuver and make a conservative approach with these factors in mind. Try to use the elements to your advantage. Allow them to carry the boat into the dock. If there are high winds or strong currents, it is best to approach the moorage from the lee side. With a mild current or little or no wind it is best to approach from the windward side. When approaching check to see that all lines are attached to the cleats on the side that you will be mooring and that fenders are lowered on that side. Be sure to check that the fenders are hung at the proper height.

As you approach your mooring it is desirable to have a person on the bow and the stern of the boat with a boat hook and a mooring line attached to a cleat. Approach at idle RPM in forward at approximately 45 degrees to the dock. When the bow is within a few feet of the dock (starboard side) the stern can be brought alongside the mooring by reversing the port engine, starboard engine in forward. These procedures are reversed for docking to port.

Mooring:

Attach lines to deck cleats by making a loop in one end, large enough to pass through hole in the base of cleat and back over entire cleat. The line now can be used to secure your boat. Lines may be kept this way while running as long as they are coiled and cannot become fouled in gear or props. In heavy sea conditions, all lines should be removed from decks.

MANEUVERING (Cont'd)

- Mooring: (Cont'd)

TIP: Tie up by running line from boat, around dock cleat, and back to boat. This way you can untie without jumping from deck to dock and back aboard. Just cast off one end and then bring the whole line on board.

- Leaving the Dock:

Be aware of wind, tide, current or other forces that effect your direction when leaving the dock and account for this in your maneuvering. Most maneuvering to and from a dock is best accomplished at 600 to 900 RPM.

Do not forget to release mooring lines and stow bumpers.

You have a choice of swinging the bow or the stern out away from the dock. If the mooring is to your starboard side (right) for the bow to be moved away from the dock, the starboard engine should be in forward and the port engine in reverse at the same RPM. This will give you a counterclockwise rotation. When maneuvering the bow out first you should watch to see that your swim platform and/or dinghy will not be forced into the dock or a piling. Another maneuver to pull away from the dock is done by moving away stern first. This is done with the starboard engine in reverse, the port engine in forward and using a bumper between the bow and the dock as a pivot point. The stern will then move away from the mooring far enough so the engine can be reversed and the bow brought out away from the dock. Both engines can then be switched forward and steering started when the boat becomes parallel with the mooring and clear of other objects.

NOTE: When maneuvering with twin engines, control is best accomplished by shifting with the engine throttles at idle. The outdrives or rudders should be straight fore and aft.

BOAT PERFORMANCE

Boat speeds are affected by a great many factors. Some, such as temperature and altitude, you cannot do anything about but you can affect other factors:

- Loading: Take only the necessary equipment with you. Keep weight low in the boat and balanced.
- 2. Propeller: Keep it in good repair and the correct pitch for your particular situation. The factory standard equipment propeller may not be the best for your particular boat and load conditions. The engine should be able to come up to 3000 RPM on a normally loaded boat. If the engine RPM at full throttle is less than 3000, try a prop of less pitch. If the engine RPM exceeds 3000, try a prop of greater pitch.

BOAT PERFORMANCE (Cont'd)

A slightly bent or nicked propeller will adversely affect the performance of your boat.

3. Weeds, barnacles and other growth: Keep your boat bottom clean. When your boat starts "growing grass" it will slow down greatly.

BOAT RUNNING ATTITUDE

- 1. If your boat runs with its bow too high at cruising speeds, move weight forward in the boat, and/or adjust trim tabs (see trim tab section below).
- 2. If your boat runs with its bow too low at cruising speeds (usually indicated by water coming off the hull far forward and the boat being difficult to steer--veering off course), you can raise the bow by moving weight aft, and/or adjust trim tabs (see trim tab section below).

TRIM TABS

Trim tabs are used to control the level (trim) of your boat at cruising speeds. Pairs of switches, identified by the words "bow down", are found at both helm stations.

The 4550 Motoryacht generally operates most efficient if an extreme bow-high attitude is avoided, and a more level attitude (slight bow-high) is used

Once the best bow attitude cruising angle is achieved, individual operation (rather than in unison, as utilized for bow attitude adjustment) of port and starboard switch can be used to somewhat offset unequal loading. Do not use trim tabs to compensate for excessive unequal weight distribution.

Trim tab adjustment should be performed with switch actuation in one second "bursts" and allowance of approximately five seconds for hull reaction.

The trim tab hydraulic fluid reservoir is located on the starboard side of the transom. The fluid level should be checked periodically (at least once per year) and refilled as necessary.

WARNING: EXCESSIVE USE OF TRIM TABS WILL CAUSE A LOSS OF CONTROL. DO NOT USE TRIM TABS IN A FOLLOWING SEA AS THEY MAY CAUSE BROACHING OR OTHER UNSAFE HANDLING CHARACTERISTICS. DO NOT ALLOW THOSE UNFAMILIAR WITH TRIM TABS TO OPERATE THEM.

DUAL STATION OPERATION

Always start the boat at the station from which you will be operating. Remind anyone near the unattended control station to "KEEP HANDS OFF". When leaving one station to begin operating at the other, bring the boat to a complete stop. Never leave the helm while the boat is underway and assume that

DUAL STATION OPERATION (Cont'd)

someone else has the boat under control. If you are operating your boat from the bridge and you encounter heavy sea conditions, you should bring your boat down to an idle, point it into the sea and have any bridge passengers move down to the cabin. If sea conditions become very heavy, you should also leave the bridge and operate your boat from the lower station. Children left unattended below should be made to wear life jackets.

CABIN LIMITS

Cabin tops and flying bridges are designed to be lightweight for proper boat balance. The cabin top/flying bridge load limit for your boat is 1000 pounds. The transom platform is designed to accept a maximum 400 pound load.

ENGINE SHUT-DOWN

1. Cool the engine down gradually, allowing it to idle in neutral for at least 5 minutes.

WARNING: IT IS IMPORTANT TO FOLLOW STEPS 2, 3, 4, AND 5 IN SEQUENCE TO AVOID POSSIBILITY OF ELECTRICAL SYSTEM DAMAGE.

- 2. To turn engine off, push the stop button.
- 3. Turn the ignition key counterclockwise to the off position.
- 4. Turn off D.C. ignition breaker switches.
- 5. Turn the battery switch off.
- 6. Close seawater intake valve.
- 7. Close fuel supply valves.
- 8. Carefully inspect engine and compartment for indications of oil, fuel, water, or exhaust leakage.

NOTE: Steps 6, 7, and 8 need not be followed for short term shut-down (overnight). For longer term storage refer to "Storage" herein.

* GRADUAL COOL-DOWN OF A TURBOCHARGED ENGINE IS VERY IMPORTANT!

THE FOLLOWING ARE HIGHLIGHTS OF SOME OF YOUR ON-BOARD SYSTEMS AND COMPONENTS. ADDITIONAL DETAILS ARE INCLUDED IN LITERATURE SUPPLIED WITH YOUR BOAT.

FLECTRICAL SYSTEM - 12 VOLT DC

DC system diagrams are provided herein for electrical analysis and troubleshooting.

The rotary switches for batteries are located in the aft cabinet on the starboard side of the salon. Switches are provided for all three batteries—engines, accessory, and generator. In addition, a jumper switch is provided to enable you to start the engines using the accessory battery in the event that engine battery power is low. Also, the jumper switch allows you to operate accessories off the engine battery. The jumper switch is to be used only as a temporary remedy and should be turned off after use.

Battery condition can be easily checked by the "Electrical System Monitor" located on the pilothouse instrument panel.

The batteries have a big job—they supply you with lights, engine starting, generator starting, and power to run many accessories. Do not neglect your batteries! Check the water level regularly by removing the caps. If the zinc plates are exposed, add distilled water. Corroded battery terminals can also let you down. Clean them with baking soda and water, and coat them with a preservative or a light film of grease. Be sure all battery connections are tight. When storing the boat, it is best to remove the battery, give it a full charge, and store it inside where there are not extreme temperatures.

The engine alternators will maintain proper charge levels in the engine and accessory batteries (some situations may require running engines at 1200 RPM to initiate charging). The port engine and starboard engine start and run off the start (engine) battery. This battery is charged by the port engine. The accessory battery is charged by the starboard engine. The isolating of the charging circuit on the starboard engine is accomplished by use of a special alternator exciter circuit. The circuit is fused at the switch using an AGC 10 amp fuse. The exciter circuit is activated by an oil pressure controlled switch installed on the starboard engine. When the starboard engine is started, the oil pressure comes up, the pressure switch closes, the exciter circuit is energized, and the alternator charges the accessory battery.

In addition to the engine alternators, the 4550 Motoryacht is equipped with a battery charger. The battery charger is located in the aft end of the engine compartment on the starboard side. The battery charger will charge all the batteries whenever the boat is plugged into 110 volt shore power or whenever the generator is operated. The circuit breaker for the battery charger on the main A.C. power panel must be in the "CN" position.

Breaker switches are located on the instrument panel in the pilothouse. Except for a few accessories (consult specific literature in your information package) such as windshield washer motor, radio, etc., there are no in-line fuses.

ELECTRICAL SYSTEM - 110 VOLT AC

AC system diagrams are provided herein for electrical analysis and troubleshooting.

The AC system is energized by either shore power or the on-board generator. Power source selection is made by a rotary switch on the AC panel located on the starboard side of the pilothouse.

Three shore power receptacles are found outside the pilothouse on the starboard side. Depending upon options selected for your Motoryacht, receptacles are either 30 or 50 amp and appropriate power cords are furnished. Since not every shore installation has 30 amp service, we recommend that 15 and 20 amp adapters be purchased.

When connecting to shore power, turn off main circuit breakers on A.C. panel. Always attach the cord to boat first, then attach the cord to the shore outlet, thereby avoiding accidental dropping of a "hot" cord into the water. Correspondingly, remove the end at the dock outlet first.

After connection to shore power, check "dockside polarity" indicators before turning on main circuit breakers. Should you be unable to hook shore power up to all three receptacles, paralleling switches on your AC panel allow you to operate accessories off of less than three power cords.

Whether using shore power or the generator, the simultaneous operation of several 110 volt accessories can result in an overloaded circuit. It might be necessary to turn off one accessory while operating another. Amperage draw can be monitored for each of the three lines by checking the ammeters on the AC panel.

DIESEL GENERATOR

The literature package supplied with your boat has a very complete operator's manual for your generator. We urge you to read this manual prior to initially operating your generator. Some highlights concerning your generator are:

- 1. Follow instructions in the operator's manual for pre-start checks and break-in procedures.
- 2. Starting switches and gauges are located on the A.C. electrical panel on the starboard side of the pilothouse. The generator battery switch is located in the cabinet on the starboard side wall, aft end of the salon.
- 3. If cold starting, actuate preheat toggle switch for 15-25 seconds. Do not preheat for more than 60 seconds!
- 4. While holding the preheat switch, turn the rotary selector switch (above the preheat switch) to the start position. When the generator starts, release the rotary and preheat switches.

DIESEL GENERATOR (Cont'd)

- 5. Never operate the starter switch for more than 30 seconds. If generator does not initially start, wait at least 30 seconds before another attempt.
- 6. Fuel for the generator is fed simultaneously from both port and starboard main fuel tanks. Should the need arise to direct fuel from either tank rather than both, fuel line valves are found below the removable salon top step.
- 7. In addition to servicing the filters attached to the generator, the filter/separator located near the fuel line valves should be serviced as indicated by the instructions included in your literature package.
- 8. The coolant mixture installed at the factory consists of equal parts water and antifreeze.
- 9. The seawater intake valve should always be open during generator operation, and the seawater strainer should be frequently checked for debris.
- 10. An emergency stop switch is located on the port side of the generator.
- 11. Approximate normal gauge readings during generator operation are: temperature = 180°F; oil pressure = 40-60 PSI.

BOT WATER HEATER

Dual hot water heaters are located in the engine compartment on the port side of the salon removable stair.

Heaters should be kept full of water to avoid damage to heating elements, and they should be drained when the possibility of freezing exists (power turned off).

There is a heat exchange system connected to the port engine and hoses related to this system should be checked for condition and leakage.

AIR CONDITIONING/HEATING

On boats equipped with optional air conditioning, both heating and cooling are controlled at each panel in the pilothouse, galley, and master stateroom.

To operate the system, proceed as follows:

- 1. Be sure the sea water inlet valve is open and 110 volt panel circuit breaker switches are off.
- 2. Set the "System Switch" on the controls at each location to "OFF".
- 3. Turn on main circuit breaker on 110 volt panel.

AIR CONDITIONING/HEATING (Cont'd)

- 4. Turn "Thermostat" fully clockwise for cooling or fully counterclockwise for heating.
- 5. Set fan speed control on "high" position.
- 6. Turn the top control knob to "start". This energizes the fans and the sea water pump. Check the overboard discharges port side of boat to be sure that water is flowing through the condensing units.
- 7. Turn the top control knob to "run". The compressor will start to cool or heat according to the setting of the thermostat.
- 8. To set the thermostat, allow sufficient time for the unit to operate to heat or cool the area to the desired temerature. When the area is sufficiently heated or cooled, turn the thermostat knob slowly to the center position until it "clicks" once. The thermostat is now set to maintain a constant temperature.
- 9. Select a fan speed desired. When operating on the heat cycle, allow the unit to run on low fan for 5 to 15 minutes until it begins to heat well. Then increase fan to efficient heat output. On the cooling cycle, use any fan speed desired. Keep in mind, however, that the lower the fan speed, the less capacity the system has.
- 10. To turn the system off, turn the system switch on the switch assembly to "OFF". Do not use the circuit breaker switches on the 110 volt panel to directly turn the system off or on.

FUEL SYSTEM

See the drawings of the "Diesel Fuel System" for a basic description of that system.

Using the supply valves, fuel can be directed from either tank to engines and generator as desired. Under normal conditions, the boat should be run with main valves open and the crossover valve closed.

Filter/separators should be inspected and maintained as instructed in your engine manual, generator manual and filter literature supplied with your boat.

The best advice for fuel tank maintenance is make sure that the source of supply is reputable and can be relied upon to furnish clean, proper, high quality fuel. Also, once you have found such suppliers, keep your tank as full as possible with their fuel. 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.

Diesel fuel of ASTM grade 2-D is recommended. The minimum cetane value is 40 (45 for cold temperature operation), and the maximum sulfur content is 0.5%. If sulfur content exceeds 0.5% oil changes should be performed twice as frequently as indicated in the engine manual.

FUEL SYSTEM (Cont'd)

It is important to prevent air from entering the fuel supply system causing poor performance or an engine that will not run. Should air be introduced into your fuel lines, detailed instructions for "bleeding" can be found in your engine manual.

Consult your dealer or local marina concerning fuel additives intended to prevent fungus or other growth in your fuel tanks.

SHAFT-TRANSMISSION ALIGNMENT

Alignment between your engine transmission output shaft and the propeller shaft is very critical. Although this alignment has been carefully performed at the factory, it should be checked again after the boat has been in the water for 48 hours. Alignment inspection should be performed as routine maintenance (after initial 30 hours of operation, then every 60 hours) and whenever unusual noise or vibration is noticed. To insure proper alignment when the boat has been launched after a haul-out or dry storage, wait for 48 hours before making final adjustments.

Proper alignment is usually achieved by moving the engine. We recommend that alignment be performed by an experienced marine mechanic. However, checking alignment is relatively easily done by following these procedures:

- 1. Remove the flange bolts at the transmission to shaft coupling and slide the shaft aft until the flanges are separated by about 1/4".
- Rotate the shaft to see if there is obvious "wobble" of the shaft flange, indicating shaft damage.
- 3. Move the shaft up and down and from side to side to determine, as closely as possible, the central position where the shaft is normally located. At this position, the boss on the transmission flange should enter the recess on the shaft flange without moving the shaft to either side or raising it more than 1/8". If this is not the case, a misalignment condition exists.
- 4. Move the shaft flange into contact with the transmission flange. Check for gap between flange faces by attempting to insert a .003" feeler gauge at the top, bottom and each side. Repeat this operation after rotating the shaft flange 1/4 turn (3 times). Misalignment is indicated when the feeler gauge is easily inserted at any point.

SHAFT LOG STUFFING BOX PACKING

The propeller shaft emerges from the bottom of the boat through an opening called the shaft log. The shaft stuffing box is connected to the shaft log by a short length of special flexible hose. Packing rings are compressed around the shaft by the packing nut. The "Stuffing Box" prevents excessive amounts of water from leaking around the shaft and into the boat.

SHAFT LOG STUFFING BOW PACKING (Cont'd)

Normal wear can cause the stuffing box leakage to increase. It can usually be stopped by loosening the locknut, tightening the packing nut slightly, and then resetting the locknut tightly. Do not overtighten, bear in mind that a slight leak (up to 10 drops per minute while running) helps to lubricate the packing and is therfore desirable.

When stuffing box leakage becomes excessive, even after following the above steps, packing replacement can be performed as follows:

- 1. Remove boat from the water.
- 2. Loosen lock nut and back packing nut off the sleeve. Remove old packing.
- 3. Wrap new packing around shaft (4 rings, 3/16") and cut rings with a razor blade at approximately 30 degrees to long axis of shaft. Stagger ends of each ring and insure rings bottom in nut.
- 4. Tighten packing nut by hand only until resistance of packing contacting the stuffing box is felt. Tighten lock nut securely.
- 5. When initially launched, the packing must be allowed to leak at a rate of about 5 to 30 drops a minute as it will expand and seal from water contact and friction heat of the turning shaft. Failure to allow this leakoff will result in packing burnout after a short period of running.

RUDDER STUFFING GLAND

As in the case of the shaft log stuffing box, the rudder stuffing gland is part of the assembly where the rudders emerge from the bottom of the boat.

It is very similar to the propeller shaft stuffing box and will require the same maintenance. Since it obviously does not receive the same wear as the propeller shaft, repacking is seldom required. This shaft stuffing gland should not leak water.

STOVE

Most 4550 Motoryachts are equipped with a natural gas range/oven. The compressed natural gas (referred to as Safgas) cylinder is located on the port side under the lounge seat of the flying bridge. Compressed natural gas is currently available at many fuel docks of major marinas. Follow "Gas Systems, Inc." instructions in your literature package for operation of your range/oven.

STEERING

Your steering system is manual hydraulic -- not power steering. At no time should you expect this system to turn as easily as a car's power steering.

STEERING (Cont'd)

If rhythmic pulsing is noticed when turning the wheel, this is the standard operation of the pump and not a malfunction. Also, at times when coming off a hardover position, a resistance is felt followed by a distinct sound. this is a normal situation resulting from the release of the check valve.

The fluid reservoir is located at approximately the center of the transom. Following instructions in your literature package and on the reservoir, check fluid level and pressure regularly.

SPOTLIGHT

The spotlight can be controlled from either helm station provided the dual switch in the pilothouse is activated for the station you desire control.

REFRIGERATOR

The Norcold refrigerator used by Bayiner operates on 110 volt AC and 12 volt DC power. When the 110 volt system is not operating, the refrigerator operates on 12 volts. When an AC source is supplied, by a generator or dockside power, the refrigerator automatically switches to 110 volt.

The refrigerator is the heaviest continuous draw on the 12 volt DC system. While operating, the refrigerator draws 8 amps. If no other 12 volt accessories are used, the refrigerator can draw a 100 amp battery dead in less than 24 hours. For this reason it is recommended that when operating on 12 volts, the cold setting on the refrigerator should not be set higher than position 2. It is also advisable to turn the refrigerator off at night. If you are going to be out more than one day and cannot connect to dockside, you should plan to run your generator or engines to maintain a charged battery.

SEAWATER STRAINERS

Seawater strainers should be periodically checked for debris. There is a strainer for each engine, for the generator, and for the air conditioning system (option) in the engine compartment. A strainer for the seawater washdown pump is located behind the hanging locker back panel of the aft stateroom.

EXHAUST SYSTEM

Your exhaust system is designed to keep water out of the engines in most conditions. It operates with a special check valve, or flapper valve, that protects the engine from backwash. However, care should be taken not to anchor stern to sea, and the engines should not be shut off if the seas are too high. Always use good seamanship and consider the seas before anchoring or shutting off the engines.

Check all of the clamps the first 20 hours. Check exhaust system clamps periodically and check the flapper to see if it is operating properly.

POTABLE WATER SYSTEM

See the drawings of the "Potable Water System" for a basic description of that system.

The water filter should be frequently inspected and cleaned as required.

When connected to a dockside water supply, the DC power switch for the water pump is best left in the off position.

Sinks and showers ("grey water") drain overboard. Sinks above the water line are gravity drain, and the aft head sink and both showers are pump drained. Pumps are located behind the sliding door located on the starboard side, forward end of the passageway. Drain pumps should be turned off after the shower or aft head sink is drained.

Water tanks on pre-1986 model year Motoryachts do not have level indicators. Therefore, water tanks should be topped-off at every opportunity to avoid the possibility of running short of potable water.

When your boat is to be left unattended for an extended period of time. It is advisable to pump the water tanks dry to prevent stored water from becoming stagnant and distasteful.

MARINE HEAD SYSTEM

Refer to the drawing and specific literature relative to your head system.

The system is designed so that waste from either head may be flushed into the holding tank or, for those traveling where regulations permit, overboard. Routing is determined by setting of "Y" valves in the compartment on the starboard side of the passageway, next to the stairs.

The holding tank can be emptied by dockside pump-out or, where permitted, by actuating the macerator pump (with the discharge seacock open) from the pilothouse DC panel.

We suggest that you leave discharge seacocks normally closed to prevent inadvertent overboard discharge of waste.

The holding tank on pre-1986 Motoryachts does not have a level indicator. Therefore, this tank should be emptied at every opportunity.

BILGE PUMPS

Your boat is equipped with two automatic bilge pumps, one located under the storage well between the diesel engines and the other beneath the removable floor of the aft stateroom hanging locker. Pumps are designed to operate automatically whenever the water rises to a certain point in the bilge. An overriding switch on the instrument panel, next to the breaker switch, provides manual control for pumping the bilges in preparation for haul-out and for back-up in case of failure of the automatic system.

BILGE PUMPS (Cont'd)

Bilge pumps work well if their intakes are kept clear of debris and the outlet hose is kept free. Occasional checking of operation is advised (add a little water to the bilge and pump out to make certain it is operating properly). To avoid damage, pumps should not be allowed to operate after bilges are dry.

WASHDOWN SYSTEM

The outlet for the aft washdown (potable water system) is located on the starboard side of the aft cockpit. The outlet for the bow area washdown (seawater system) is located in the portside bow deck locker. The seacock, strainer, and pump for the bow washdown is located behind panels in the aft stateroom hanging locker.

In addition to instructions found elsewhere in this manual and in the literature specific to certain components, the following information is provided for general maintenance and repair.

Because conditions vary widely in different areas and frequency and type of use can differ greatly between owners, intervals for maintenance are not stated herein. Common sense should determine the frequency of maintenance.

BILGES/ENGINE COMPARIMENT

- 1. Pump bilges dry and remove all loose dirt. Be sure all limber holes are open. If there is oil in the bilge and the source is not known, look for leaks in engine oil lines, coolers, transmission, or engine gaskets. Oil stains are best removed by use of a bilge cleaner available from your dealer or a marina. Do not use flammable solvents.
- 2. Check all below deck wiring to be sure it is properly supported, insulation is intact, and there are no loose or corroded terminals. If there are corroded terminals, they should be thoroughly cleaned with sandpaper or replaced. Tighten securely using a lock washer and spray with WD-40 or similar preservative.
- 3. Inspect the entire fuel system (including fill lines, vents and suction lines) for any evidence of leakage. Any stains around joints could indicate a leak. Try a wrench on all fittings to be sure they are not loosening, but do not overtighten. Clean fuel filters and vent screens. Operate all valves to be sure they are in good condition.
- 4. Inspect the entire bottom for evidence of seepage, damage or deterioration, paying particular attention to hull fittings, hoses, and clamps. Straighten kinked hoses and replace any that do not seem pliable. Tighten loose hose clamps and replace those that are corroded. Tighten any loose nuts, bolts, or screws. Operate seacocks to be sure they are in good condition.
- 5. Refer to your engine operating manual for details of maintenance. Wipe off engines to remove accumulated dust and grease. If a solvent is used, make sure it is non-flammable. Go over the entire engine and tighten nuts, bolts, and screws, including the mounts (do not turn mount adjusting screws). Inspect the wiring on the engine and clean and tighten terminals as previously described. Inspect belts and tighten if needed. Replace any belt that is cracked and frayed. Clean and lubricate battery terminals; fill cells with distilled water as needed.

CABIN AND TOPSIDE AREAS

 Test all electrical equipment and appliances to make sure they operate properly. Inspect all wiring for proper support, sound insulation and tight terminals. Pay particular attention to portable appliance cords and plugs.

CABIN AND TOPSIDE AREAS (Cont'd)

- Inspect and operate heads, basins, showers, sinks, and fresh water system, including tank. Check and operate water pumps, including shower pump and sink drain pumps. Check all water lines and connections for leaks and make sure all connections are secure.
- 3. Check bow rails, ladders, and grab rails for loose screws, breaks, sharp edges, etc., that might be hazardous in rough weather. Inventory and inspect life jackets for tears and deterioration. Check your first aid kit to make sure it is complete. Check signalling equipment. Inspect anchor lines, mooring and towing lines and repair or replace as required. DO NOT stow wet lines in chain locker or below decks or they may mildew and rot.
- 4. Salt and brackish water are capable of etching and damaging window glass. Keeping windows clean is the best preventive measure you may take. When cleaning, flush with plenty of fresh water.

To clean plexiglass, which is being used with much more frequency because of its safety and weight, caution should be exercised because of its tendency to scratch.

First, use generous amounts of water to wash off as much dust as possible. Use your bare hands with plenty of water to dislodge any caked dirt. Then use a soft grit-free cloth or clean soft sponge with a detergent or non-abrasive type soap. Dry with a clean damp chamois, with a blotting action. Never use a glass cleaning solution or a duster as they will scratch the surface. Remove any grease or oil with kerosene or hexane. DO NOT use solvents such as acetone, benzine, carbon tetrachloride, fire extinguisher fluid, dry cleaning fluid, or lacquer thinner since they will attack the surface.

- 5. To keep teak looking fresh, it should be treated with teak oil at least twice a year (more often if exposure is severe). If the teak is in particularly bad condition, the teak oil should be rubbed in using 220 grit wet and dry sand paper.
- 6. Use nearly any of the metal cleaners on the market today to spruce up hardware. After a good cleaning, a coat of paste wax will add greatly to its luster. All metal fittings, including dash panel, instruments, railings and hardware, should be sprayed with a rust inhibitor similar to WD-40. If not maintained on a regular basis, stainless steel railings and fittings will discolor.
- 7. A variety of high quality fabrics have been used in the construction of your yacht. Proper care and cleaning of all fabrics will contribute to their long life.

Prior to cleaning any fabric we suggest that you test your cleaning solution and method on a hidden or inconspicuous area.

Windshield and component covers as well as vinyl upholstery can be cleaned using a regular vinyl cleaner. Vinyl cleaners may be obtained in grocery

CABIN AND TOPSIDE AREAS (Cont'd)

or auto parts stores. To prevent rainwater seepage at the seams, a coating of "Scotch Gard" can be applied to the seams on the inside of the vinyl. Mildew can occur if your boat does not have adequate ventilation. Heat alone will not prevent mildew. If mildew does occur, it can be removed using a solution of hot water and "Clorox" (one cup of "Clorox" to one gallon of hot water). Brush into affected area, let set for 10 to 15 minutes and rinse with fresh water. If at all possible, the vinyl top parts of your boat should be stored indoors in a fairly warm, dry place. This will greatly extend the life of the material.

Dry cleaning should be considered for interior fabrics other than vinyl.

8. Your marine instruments have been designed and constructed of the best possible materials and with proper care will give you years of trouble free operation.

When instruments are exposed to a salt water environment, salt crystals may form on the bezel and the plastic covers. These salt crystals should be removed with a soft damp cloth; never use abrasives or rough dirty cloths to wipe plastic parts. Mild household detergents or plastic cleaners can be used to keep the instruments bright and clean.

HOLL

- 1. The finish on the fiberglass boat is similar in character to that of an automobile and will respond to the same system of care and cleaning. Car waxes and cleaners are often used to maintain a sparkling finish. Also, a variety of polishes and cleaners for fiberglass are now on the market. Some are very good and we suggest you experiment with different brands to determine what you like best.
- 2. Almost unavoidable during the life of your boat is damage to the gelcoat or colored surface. This is not as serious as you might think. Repair is not costly and can be done by the novice.

Scratches: If the scratch does not penetrate the gel coat surface, use automotive rubbing compounds. Dampen a soft rag and apply rubbing compound with plenty of "elbow grease". The scratch may not disappear completely, however, its noticeability will decrease.

Couges and Chips: To repair, simply obtain "Patch Paste" from your Bayliner dealer and follow this recommended procedure:

- Clean area to be repaired of wax and oil. Acetone is a good solvent.
- Use a small portion of patch paste on a piece of cardboard, mix thoroughly with the catalyst (two or three drops of catalyst to a tablespoon of paste).
- Apply to pit, chip, or gouge with a single edge razor blade to match

HULL (Cont'd)

the surface contour of the area being repaired. It is better to have an excess than not enough of the paste.

- Allow to harden thoroughly. In most climates, one to two hours should be sufficient.
- Shape the patch as desired, using fine wet sandpaper.
- Finish using automotive rubbing compound in the same manner as for scratches.

WARNING: TEAK OIL, ACETONE AND CATALYST ARE HAZARDOUS MATERIALS AND SHOULD BE USED ONLY IN WELL VENTILATED AREAS. FOLLOW MANUFACTURER'S INSTRUCTIONS.

3. There are many factors that will come into play in determining how often it will be necessary for you to paint the bottom of your boat. First of all, it is necessary for you to understand that the bottom paint on boats is designed to slowly dissolve to prevent the retention of marine growth. This fact is generally not understood, but it is unusual to find a boat bottom that does not need repainting after a season's use.

As necessary, usually once a year, your boat should be pulled from the water, scrubbed and repainted. It is not always necessary to repaint the bottom each time it is scrubbed, but no bare spots should be permitted.

Our recommended procedure for repainting the bottom is as follows:

- Prepare the bottom by sanding, cleaning and fairing as required.
- It is imperative that the new paint be applied over a perfectly dry surface. Fiberglass hulls should never be hauled, painted and relaunched in the same day since this does not allow sufficient time for the moisture which has been absorbed into the old paint film to completely dry out. Generally, 24-36 hours of drying time will be required.
- The hull below the waterline has been originally painted with either "Petit" Bioguard (#1265) or "International" Tri-Lux (#66). When repainting, use either of these two paints or a paint that is compatible.
- 4. While your boat is out of the water you should check for stray current corrosion. Stray current corrosion, or electrolysis, can be prevented several ways. The following are the most common causes and the simplest cures:
 - Keep a clean dry bilge. Wiring may leak a certain amount of electricity.
 - A poorly grounded zinc anode: Check ground wire, clean contact surfaces.

HULL (Cont'd)

- The zinc anode may be deteriorated beyond effectiveness: Replace at usually 50% loss. Zinc anodes are found on both outboard trim tabs, both propeller shafts, and the center of the transom.
- Do not use a copper based bottom paint as it can cause electrolysis on some metal parts. If your boat is permanently moored we recommend you contact someone in your area specializing in corrosion control and have them check your boat in its moorage to see that it is properly protected.
- 5. Also, while your boat is out of the water, propellers, rudders, and shafts should be inspected for damage.

Your boat has been fitted with 22x21 propellers based on operation at sea level, four persons aboard, and a relatively light load. Variances in altitude and load can impact performance. Your boating needs may dictate a propeller change. Your Bayliner dealer can help you in the selection of propellers better suited to your needs.

Rudders should be parallel such that the difference between the center of the leading edges and trailing edges is less than 1/4-inch. Adjustment is performed at the transom, inside the engine compartment.

- 1. If your boat is to be stored out of the water, it is extremely important that its hull is properly supported to avoid permanent hull shape distortion. If stored inside, it should be a well ventilated building. (Refer to the "Sling Locations" drawing depicting proper placement of slings for lifting your boat. In addition to sling placement, is is important to use proper spreader beams that place slings vertical at the lift points.)
- 2. Refer to your engine and generator manuals for storage instructions.
- 3. Drain the fresh water tanks and system by first opening all faucets and running the water pump (be sure that the hot water tank power switch is turned off). Run the pump until empty, draining accumulated water in the pump to avoid damage due to freezing. Remove caps from hot and cold lines to allow any remaining water to drain into the bilge and overboard with bilge pumps (caps are located in the engine compartment under the passageway stairs).
- 4. Flush each head several times. If stored in salt water, close seacock, add fresh water to bowl and allow to stand for a day or more to dissolve accumulated salt. With seacock closed, flush until pumped dry. Pump out holding tank.
- 5. Fuel tanks should be filled so there is little air space, thereby, minimizing condensation.
- 6. Refer to your engine manual for storage procedures related to the engine seawater cooling system and batteries. (Note: Generator instructions are similar to engine.)
- 7. Thoroughly clean your boat. If possible, remove cushions, mattresses, blankets, towels, and other items that can hold moisture and cause mildew. Such items left on board should be positioned for maximum air circulation—stand mattresses and cushions on edge.
- 8. Defrost and dry out refrigerator, ice maker, and freezer, prop doors open. Leave drawers and locker doors open.
- 9. Clean hardware and coat with rust inhibitor.
- 10. Lubricate steering mechanism and throttle control in engine compartment.
- 11. Close seacocks.
- 12. Provide as much heat and ventilation for interior spaces as is safe and practical.

ONE YEAR LIMITED WARRANTY

Bayliner warrants to the original purchaser of its boats operated under normal, non-commercial use in the U.S. or Canada that it will repair or replace any parts found to be defective in factory materials or workmanship within one year from date of retail delivery.

WHAT IS NOT COVERED

This 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) window breakage or leaks; gel coat finish, blisters, cracks or crazing; (4) Hardware, vinyl tops, vinyl and fabric upholstery, plastic, metal wood or tape trim; (5) Any Bayliner boat that has been altered, subjected to misuse, negligence or accident, or used for racing purposes; (6) Any Bayliner boat which has been overpowered according to the maximum horsepower specifications on the capacity plate provided on each Bayliner outboard boat; (7) Any Bayliner boat used for commercial purposes; (8) Any defect caused by failure of the customer to provide reasonable care and maintenance.

OTHER LIMITATIONS

THERE IS NO OTHER EXPRESS WARRANTY ON THIS BOAT. TO THE EXTENT ALLOWED BY LAW:

- 1. Any implied warranty of merchantability is limited to the duration of this written warranty.
- 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 states do not allow limitations on how long any implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This 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 Federal regulations, it is essential that your warranty registration card be submitted within 30 days of delivery of your boat. Return of this card is a condition precedent to warranty coverage. Before any warranty work is performed, we require that you contact your selling dealer to request warranty assistance.

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, haul-outs and other expenses incurred in returning the boat for warranty service.

Bayliner Marine Corporation P.O. Box 24467 Seattle, WA 98124

NAUTICAL TERMS

ABEAM: Either side of the boat.

AFT: To the rear or near the stern.

BEAM: The width of the hull.

BILGE: The lowest portion inside a boat (in a fiberglass boat, generally

the underdeck and lower portion of the engine compartment).

BOW: The forward portion of the boat.

CHINE: The intersection of the side and bottom of a V-bottom boat.

DRAFT: Vertical distance from the waterline of boat to the lowest point

of the boat.

FATHOM: A measurement of 6 feet generally used to measure water depth.

FREEBOARD: Vertical distance from deck to waterline.

GUNWALE: Where hull and deck meet.

HATCH: A covered opening in the deck.

HEAD: Toilet or toilet room.

HELM: Steering wheel.

KEEL: The lowest external portion of the boat.

KNOT: Nautical mile per hour; nautical mile is 6,076 ft.; land mile is

5,280 ft.

LEE: Opposite from which the wind blows.

MAYDAY: International spoken distress signal for radiotelephone.

PORT: To the left side of the boat.

PORTLIGHT: A hinged window in the boat's cabin or hull.

SCUPPER: An opening in a deck or cockpit permitting water to drain

overboard.

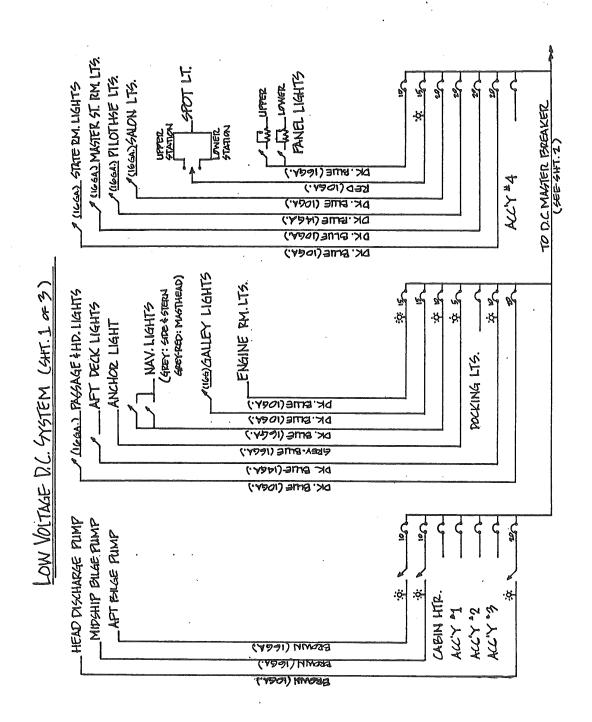
STANCHION: A fixed, upright post used for support (of rails or lifelines).

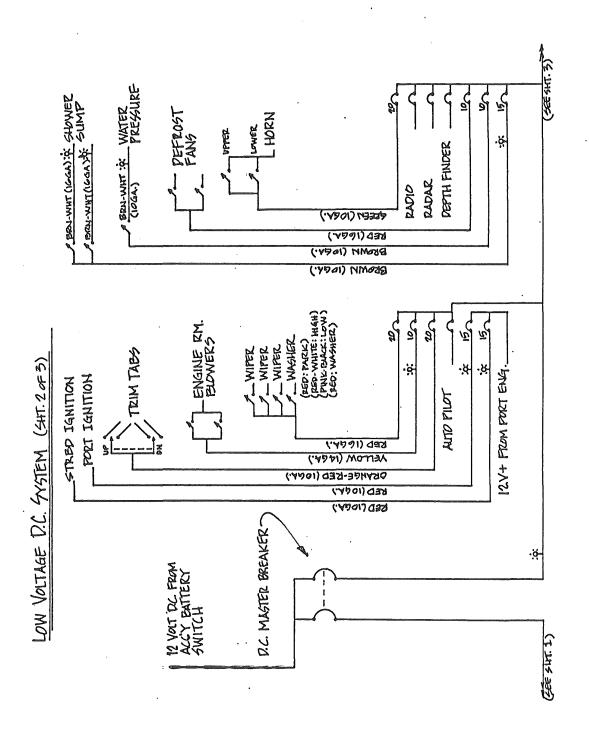
STARBOARD: To the right or right side of the boat.

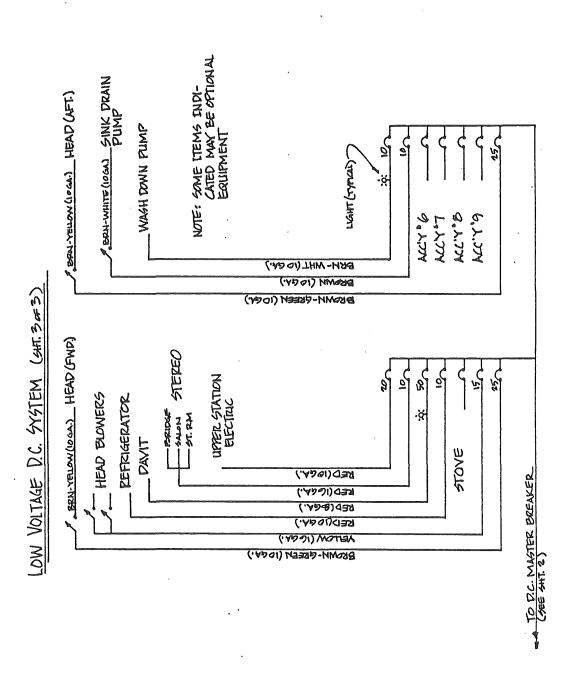
STERN: The rear of the boat. STERNDRIVE: Inboard/outboard unit.

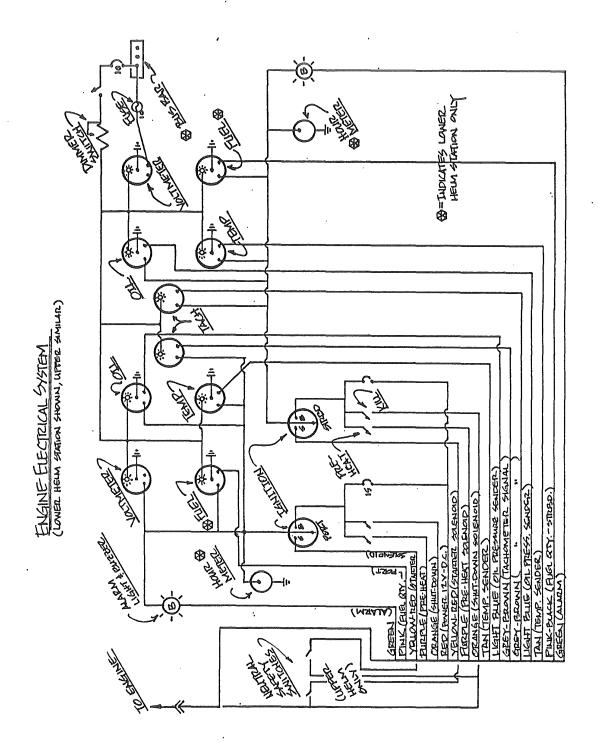
TRANSOM: The vertical part of the stern.

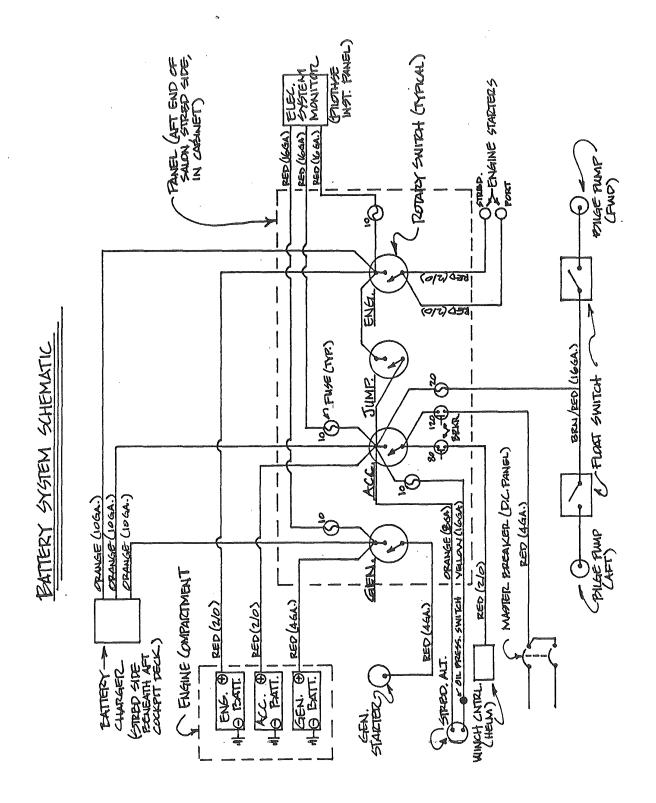
WINDWARD: The direction from which the wind is blowing.

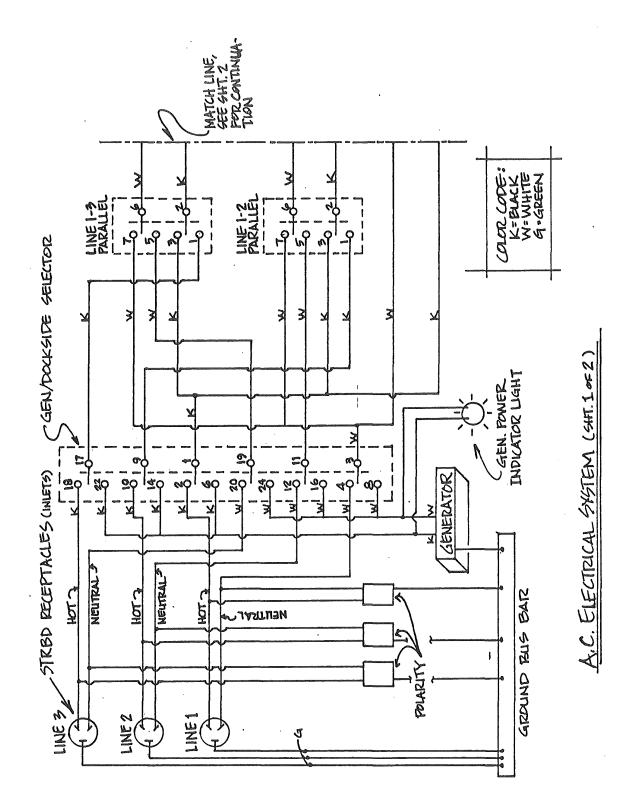


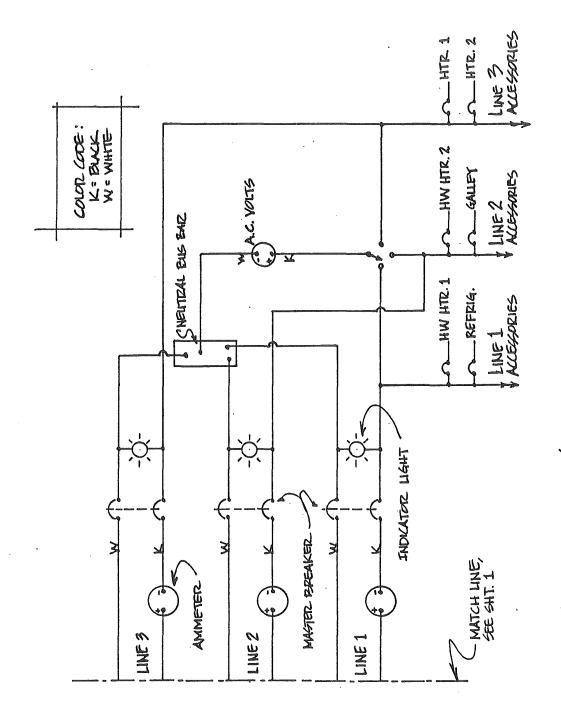






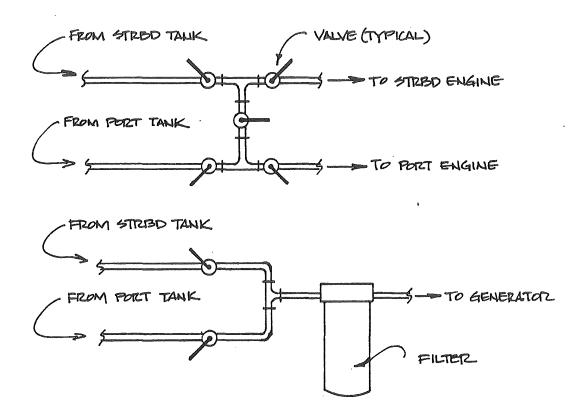






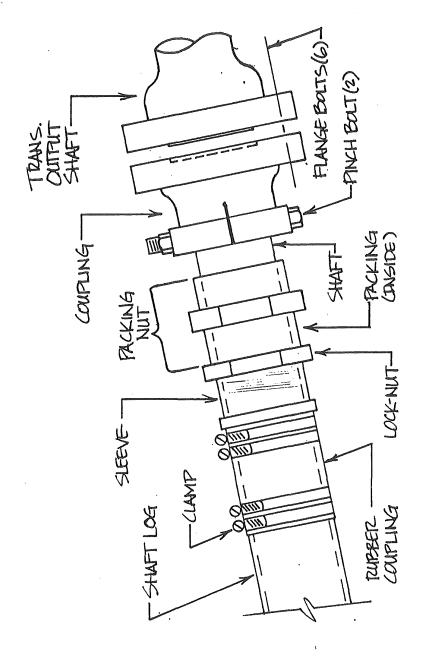
A.C. ELECTRICAL SYSTEM (SAT. 2012)

- Fitting (not used) - Fitting (not used) - Riel Gauge Säncer. - Generator Supply ARE "FUEL VALVES" DWG. - FUEL TANK (238 GAL.) - STERP -- FUEL TANK (250GAL.) - Fuel Gauge Sender - Port Engine Return - Generator Return - Port Engine Supply VIRED ENGINE SUPERY GENERATOR SUFFEY O CON VENT 党 Ó FILTER 2 FILTER PICER CY FIEL SYSTEM DIAGRAM VIAPBOARD POST EVGINE FNGINE CONT.

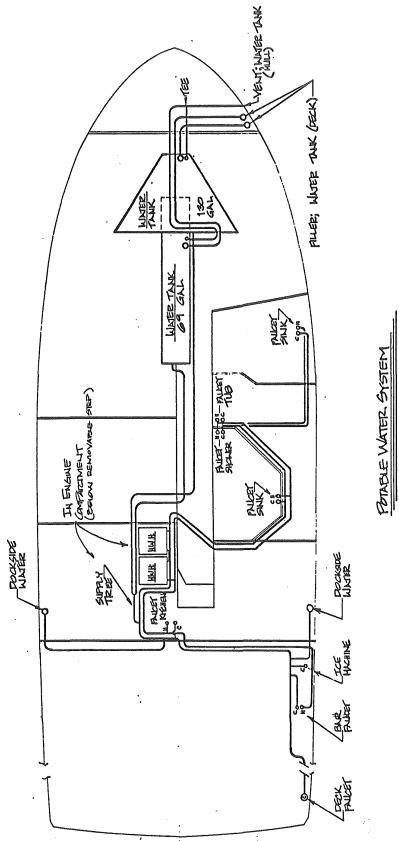


FUEL VALVES

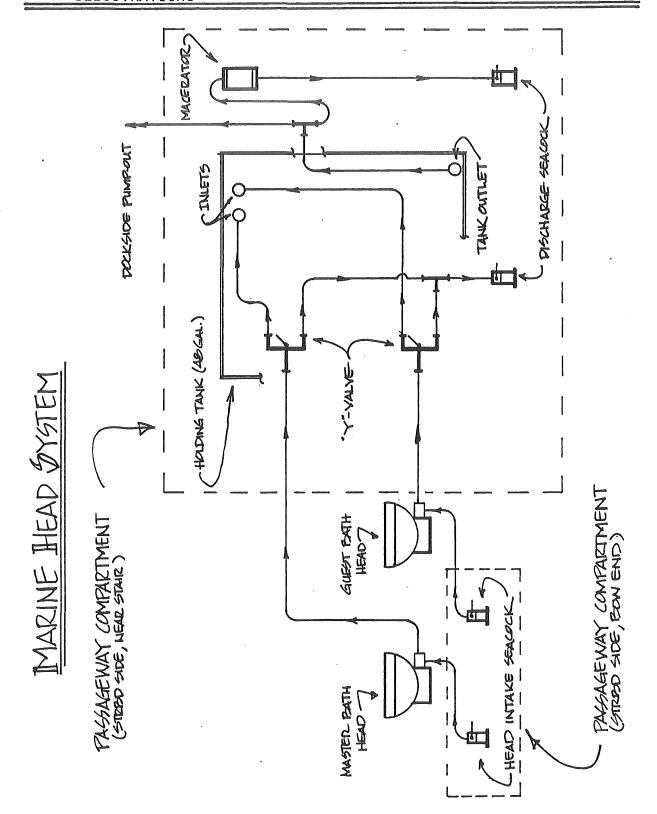
LOCATION: STRBD SIDE, BELOW PASSAGEWAY STEP

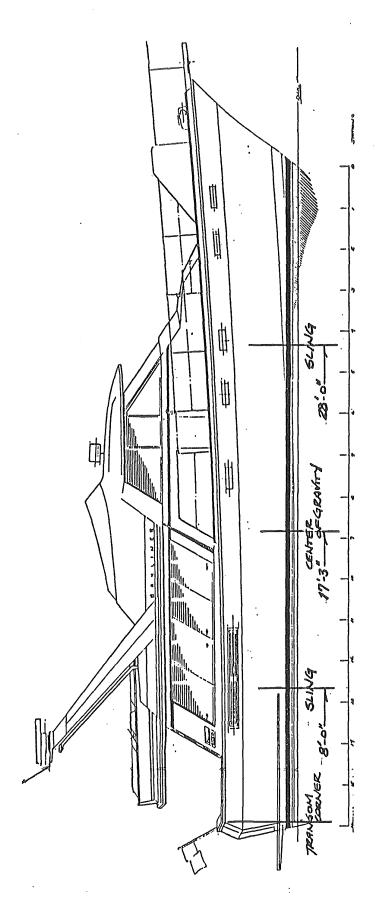


HAFT/TRANSMISSION COUPLING



-41-





LIFTING SLING LOCATIONS

- A -	<u>- F -</u>
Air Bleeding 18 Air Conditioning 16 Alignment, Shaft/Trans 18, 40 Alternators 14 Anchor 3 Anode 26 Antifreeze 16 Attitude, Running 12	Fabric 24 Fenders 10 Fiberglass 25 Floatation Devices 2, 9 Fuel 17 Filling 6 Filters 17 Fittings 6 System 17, 23, 38
<u>- B -</u>	Tank 17 Valves 17, 39
Battery 14, 28, 35 Bilge 23 Blower 6 Bottom Paint 26 Break-in 8 Buoys 2	Gelcoat 25 Generator 15 Glass - 24 Growth, Marine 26
Cetane 17 Coolant 16 Cruise Plans 3, 9 Current Corrosion 26	<u>- H -</u> Hardware 24, 28 Head 28, 42 Heating 16 Hull 25
Docking 10 Dockside Pump-out 21 Drain 21 Dual Station 12	<u>- I -</u> Instruments 25
Electrical, A.C 15, 36 Amperage 15 D.C 14, 31 Overload 15 Paralleling 15 Polarity 15 Electrolysis 26 Exhaust 8, 20 Extinguisher 3, 9	

*	
- N -	Starting 7
Clinical Control Contr	Starting 7 Static Float 5
Natural Cas 19	
Cylinder 19	Steering 8, 11, 19, 28
Nautical Terms 30	Stopping 9
Zima on one Towning	Storage 28
*	Stove 19
= 0 =	Strainer 16, 20, 22
<u> </u>	Stray Current 26
Oil Programs 0 16	Stuffing Box 18
Oil Pressure 8, 16	Support, Hull 28
_ n	
= P =	<u> </u>
De claire a 10	
Packing 18	Tank
Leak 18	Holding 21
Paint, Bottom 26	Water 21
Paralleling 15	Teak 24
Performance 11	Temperature 8
PFD 2	Tools 4
Plexiglass 24	Trim Tabs 12
Polarity 15	ITIM TANS IZ
Potable Water 21, 28, 41	
Preheater 7	**
Pre-Start 6	- U
Propeller 11, 27	
	Upholstery 24
Pump	
Bilge 21	
Washdown 22	- V -
Water 21	адрация на населения
Pump-out 21	Ventilation 28
	Winyl 24
	Voltage 8
- R -	vor eage .
647-432	
Refrigerator 20, 28	<u>- W -</u> '
Registration 29	- VV
Repacking 19	Walso 2 10
Rudder 19, 27	Wake 2, 10
Running Attitude 12	Warm-up 8
raining recitate == 12	Warning, Engine 7
	Warranty 29
C	Washdown 22
<u>- S -</u>	Water
	Grey 21
Safety 2, 4	Heater 16
Service 1	Potable 21, 41
Shift 8	Pump 21
Shore Power 15	Tank 21, 28
Shut-Down 13	Temperature 8
Slings 28, 43	Windows 24
Speed 8	
Spotlight 20	Wiring 23, 31-37
Starter 7	
/	ra .
	<u> </u>
	 -
•	Zinc Anode 26