

# This Manual is the Property of:

	A CONTRACTOR OF THE CONTRACTOR
ADDRESS	1000/4
BOAT MODEL:	SERIAL NO:
ENGINE SERIAL NO:	OUTDRIVE NO:
ENGINE SERIAL NO:	OUTDRIVE NO:
PROP. SIZE:	PART NO:
IGNITION KEY NO:	IGNITION KEY NO:
LICENSE NO:	TRAILER SERIAL NO:
PURCHASED FROM:	1000-2004-2004-2004-2004-2004-2004-2004-
DATE:	
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	OFFICE OF THE PROPERTY OF THE
BOAT REGISTRATION NO:	
CURRENT PERMIT NO:	RADIO CALL NO:
INSURED BY:	
ADDRESS:	
PHONE:	POLICY NO:

You should register your boat in the state in which you live or with federal authorities, whichever is required in your locale. The numbers assigned should be displayed according to local law.

# **ENGINE SERVICE RECORD**

DATE	ITEMS PERFORMED
<b>.</b>	

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# Section I

# Welcome Aboard

The purpose of this manual is to inform and familiarize both the novice and seasoned skipper with his new equipment. It will not tell you everything there is to know about boating, but will assist with the operation of equipment built and supplied by Bayliner. (Equipment, specifications and price subject to change without notice.) When your Bayliner needs service, see your authorized Bayliner dealer.

Understanding your new boat and how it works is essential to boating enjoyment and your safety. We recommend a three-step program for fuller pleasure:

- Make certain you get a full explanation of all systems from your dealer before taking delivery.
- Read this manual thoroughly, with particular emphasis on these sections:

STARTING
CHECKING FOR FUMES
CARBON MONOXIDE
ALCOHOL STOVES
LOADING LIMITS
TRIM TABS
SAFETY SUGGESTIONS
FLOTATION
LIMITED WARRANTY

3. Practice. All members of the family should be familiar with boat operation and how all systems work.

# Section II

# Recommended Procedures for Launching, Fueling, Operating, Safety Inspecting, Trailering and Docking Your Boat.

At the time of the first launching of your new Bayliner, it is very important the procedure noted below be followed. Bayliner power boats in the 1500 through 2750 series are water-tested at our factories on a random sample basis only. Therefore, your new Bayliner must be checked closely when first launched.

## A. Launching

- Each Bayliner power boat is equipped with a transom drain plug.
   Make sure this plug is in place and tight.
- Inspect the bottom of your new Bayliner and make a mental note of all fittings below the waterline. Then proceed with the launching.
- Once in the water, immediately board your boat and inspect the motor compartment for signs of leakage. Check the area of any other through-the-hull fittings for signs of leakage.
- 4) If any leaks are noted, the boat should be removed from the water. If the selling dealer is not present, he should be notified so the leaks may be repaired before relaunching the boat.

# B. Fueling

- Prior to fueling extinguish all open lights; close all hatches, windows and doorways; stop all engines, motors, fans and other devices liable to produce sparks.
- 2) Bayliner inboard models are fitted with a through-the-deck fitting marked "Fuel". Remove the cap and insert the fuel nozzle, allowing the nozzle to make contact with the through-the-deck fitting. This contact will protect against static electricity.
- 3) Open the motor box or deck hatch, exposing the motor/fuel tank area, and proceed with filling the tank. After 10 or 15 gallons have been pumped in, stop to inspect the area of the engine and fuel tank for signs of leakage or fumes. If nothing is detected proceed with fueling. When tank is full, again check the motor/fuel tank area.
- Install the fuel fill cap.

- 5) Wash down the area around the fuel fill with fresh water.
- 6) In the case of portable fuel tanks on outboards, remove tanks from the boat for filling. Once filled, they should be hosed down and wiped off before being replaced in the boat.
- On very hot days allow for expansion. Do not fill the fuel tank completely.
- If, when filling the fuel tank, you can't put fuel in at a reasonable rate, check the fuel vent line to see that it's free and not kinked.
- A periodic check should be made of the motor/fuel tank area.
   Any sign of seepage or fumes should be investigated.

#### C. Starting

- With your motor box or floor hatch still open, proceed as follows to start the engine.
- 2) Check the engine oil level, test alternator/water pump belts for tension and check entire motor area to see everything's in its proper place. Important: check entire area visually as well as by sniffing to insure no fuel vapors or fuel are present.
- 3) Turn on blower and allow to run for four minutes. Do not turn blower off until you are under way and at cruising speed.
- 4) Pump the throttle two or three times and turn the ignition key to the start position.
- 5) As soon as the engine starts, set the engine speed at 1200 rpm's and check your oil pressure. Oil pressure will vary from one engine to another, but it should come up immediately. If it doesn't, shut the engine down.
- 6) When the oil pressure checks OK, go back and check the engine again for fuel vapors or fuel leakage. Give particular attention to all fuel fittings and check for any sign of water. Water leaking from the engine might indicate the block drain plugs are open.
  - CAUTION: Check engine and fuel compartments, and operate blower for at least four minutes before starting, during starting and when operating below cruising speeds.
- 7) If everything checks OK, close the motor box or floor hatch.
- 8) Return to the helm and check the ammeter or volt meter, if your boat is so equipped. The ammeter should show a charge and the volt meter should be in the green at 12 volts. The temperature gauge should start coming up.
- 9) Now bring the engine back to an idle. Idle rpm should be 600-800 when the engine is warm.

CAUTION: Idling at the dock for long periods of time, or running your boat with the slant back cover or camper back cover in position, may result in dangerous accumulations of carbon monoxide inside the boat. Avoid either of these practices if possible. Remove the cover or otherwise ventilate the boat if conditions are such that this may occur.

#### D. Controls

- With the boat tied securely to the dock, advance the shift control to forward. Bring back to neutral, hesitate and bring the shift lever back to reverse. Return the lever to neutral. The boat thrust should correspond to the shift lever position. When shifting in or out of gear, move the shift lever firmly and quickly.
- 2) On inboard and stern drive models, have someone watch the rudder or lower unit while you turn the steering wheel to port and to starboard. When you turn to port, the rudder or outdrive should swing to port. The same is true for outboard powered boats.

If you have followed the procedures above, then the most important functions of your boat have been checked. Any discrepancies noted should be reported to your dealer immediately. DO NOT ATTEMPT TO OPERATE YOUR BOAT UNTIL THE PROBLEM IS CORRECTED. If everything has checked out OK, you're ready to go boating. Have fun!

For maximum safety and fun afloat, the procedures above should be followed each time you operate your boat. They are not just for beginners. Seasoned skippers—like airplane pilots—perform these checks each time they launch, fuel or operate their boats.

## E. Safety Inspection

- You should check to make sure you have the following safety items, tools and spare parts on board.
  - a. fire extinguisher.
  - b. life preservers—one for each person on board, plus one throwable flotation device. All should show a Coast Guard approval tag on them.
  - c. boat hook or paddle.
  - d. fenders
  - e. lines
  - f. chart for intended operation area
  - g. flashlight

- h. flares, night and day types
- i. small tool box with:
  phillips head screw drivers
  slot head screw drivers
  pliers, vise grip
  regular open-end wrenches
  electrical tape
  jackknife
  allen wrenches
  hacksaw
  hammer
  ratchet, sockets and extension

feeler gauges lubricating oil battery jumper cables water pump pliers friction tape hose clamps assorted screws, bolts nuts and washers waterproof matches

- j. spare parts: spark plugs alternator belt and/or water pump belt distributor caps breaker points condensors gear lubricant cabin lights, courtesy bulb number GE-94 or GE-90 WD-40 (rust inhibitor) navigation light bulb number GE-90 dome lights number GE-1141 propeller nut and washer drive pin, if required spare propeller fuses, numbers SAE10, SAE30
- Instruct passengers in the use and location of life jackets and fire extinguisher.
- 3) Check your self-contained head. It should be charged with a fresh chemical solution before starting a trip.
- 4) Check your water system. It should be filled and the operation of the manual or pressure pump should be tested. Your pressure pump system has a switch in the galley area that activates the pressure pump. When your water tank runs dry, you should shut off the pump as continuous running when dry will damage the pump.
- 5) 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. Don't run your pump dry. Add a little water to the bilge and pump out to make certain it is operating properly.

#### F. Trailer

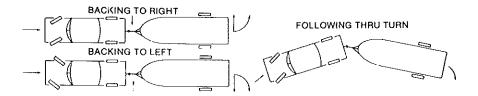
- Purchase a trailer with the proper capacity rating. A trailer that is sprung to carry more weight will ride too roughly and can damage your boat. Too little trailer capacity will be unsafe on the highway, as well as not meet legal requirements.
- 2) Consult your state laws as to brake requirements, and check brakes for proper operation prior to departure on each trip.
- 3) Check tires for proper inflation. Underinflated tires heat up rapidly and tire damage is likely to occur.
- 4) Wheel bearings should be checked at least every 90 days and before putting your boat away for the season.
- 5) Your boat should be fastened to the trailer by a line from the bow eye to the winch line PLUS a safety chain or cable to the winch stand or trailer tongue. The stern of your boat should be tied down to the trailer from the stern eyes.
- 6) Check to be sure the tail lights and turn signals work when attached to the towing vehicle. Some automobiles require heavy duty flasher units to make turn signals work properly.
- 7) Your trailer should support your new boat in as many places as possible and be adjusted so the load is well divided between the supporting rollers or pads. Occasional lubrication of the rollers aids in launching and retrieving your boat.
- 8) Too much or too little tongue weight will cause difficult steering and tow vehicle sway. A rough rule of thumb is 5% to 10% of boat and trailer weight on the tongue.
- 9) Close and secure all cabin windows and doors. Store equipment so that it cannot slide or fall.
- 10) Before towing, take down the convertible top, side curtains and back cover. They can be damaged.
- 11) Check springs and undercarriage for loose parts.
- 12) Carry a spare wheel and tire to fit your trailer and tools sufficient to change it.
- 13) On extended trips, carry spare wheel bearings, seals and races. Due to the immersion necessary to launch your boat, trailer bearings and packing will not last the mileage they will in your auto.
- 14) Before backing your trailer into water, disconnect the light plug from the car. This will greatly reduce the chances of blowing out your trailer lights when they become submerged.

#### G. How to back up a trailer

We will attempt to show you how it is done in pictures. However, practice makes perfect, so we suggest using an empty supermarket parking lot can be the biggest benefit.

NOTE: When backing, be sure to have a lookout — your visibility may be severely impaired. On boats equipped with a sterndrive powerplant, make certain the drive unit is in an up position and will clear obstacles; outboards should be in the tilt-up position.

- 1) Turn the front wheels of the car in the *opposite* direction from which you want the trailer to go.
- 2) Once the turn is started, follow the trailer as you would normally backing the car.
- 3) When rounding turns on highways or streets, do not cut corners.
- 4) Equip your vehicle with a right-hand mirror a real benefit when passing and parking.



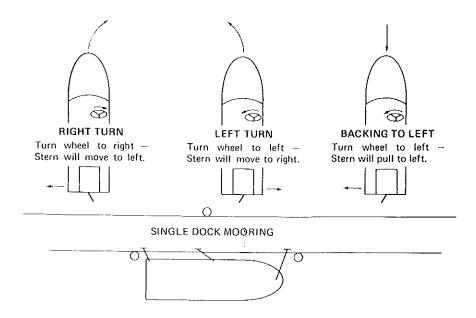
# H. Getting away from the dock

Now comes the Big Moment. Piloting a boat is a lot like learning to drive a car. Extra caution and slow speeds cause fewer accidents. The diagram on page 13 will help you understand how your new Bayliner steers. After leaving the dock, secure and store any fenders or mooring lines.

#### Practice Maneuvers

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

- 1) Practice docking by using an imaginary dock.
- 2) Practice stopping. You have no brakes, but reverse works well at low speeds.
- Remember your boat is very heavy. When operating in close quarters or docking, all maneuvering should be done at idle speed. Deep-V boats do not track straight at slow speeds. Proceed with caution in congested areas.



 Gradually increase your speed. Get used to the boat before any full throttle operation.

Have fun and stay calm. With patience, you will learn more quickly and enjoy it more.

# J. Docking

Proper docking begins with proper preparation. Start by being 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.

- 1) Attach lines to deck cleats by making a loop in one end, large enough to pass through hole in base of cleat and then back over entire cleat. Pull line tight. Done this way, the line will not come off cleat. Line can now be used to secure 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.
  - 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 by just casting off one end and then bringing the whole line onboard.
- Be aware of wind, tide, current or other forces that may effect your direction when leaving the dock and account for this in your

maneuvering. Most maneuvering is best accomplished to and from a dock at 600 to 1000 r.p.m.'s.

When approaching a mooring situation where there is a wind, tide or current, try to use these things to your advantage. Allow them to carry the boat into dock. If there are high winds or strong currents, it is best to approach the moorage from the leeside; with a mild current and 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.

3) SINGLE ENGINES: With single I/O's or inboards, when your bow cannot be pushed away from the dock first (which is most desirable) when leaving a mooring on your starboard side, start forward with wheel to starboard in idle for 2' or 3'. Then shift to reverse with steering full to port. Repeat if necessary to get the stern far enough away from the dock so you can back clear of any other boats that may be moored ahead of you or behind you. (Reverse wheel directions when leaving port docking.)

CAUTION: Most anchoring and mooring areas have restricted speeds and as a matter of common boating courtesy, watch your wake.

DUAL ENGINES: The same procedure should be followed with 4) the exception of maneuvering the boat away from the dock. For dual engines 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 r.p.m. This will give you a counterclockwise rotation. When maneuvering the bow out first you should watch to see that your swim platform and/or dingy won't 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 engines 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.

When approaching a mooring area, check your speed within 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 effect your maneuver and make a conservative approach with these factors in mind.

- 5) SINGLE SCREW BOAT: When possible, 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 morring line attached to a cleat. When approaching on the starboard side, approach at idle r.p.m. in forward at approximately 45 degrees to the dock. When your craft is ½ to ¼ of a boat length away, turn hard to port, and stern will swing into the mooring. Now turn to starboard and at idle r.p.m. put the boat into reverse. This will stop the boat and bring the stern even closer to the dock. At this time, the boat can be put into neutral and any small maneuvering accomplished by moving the gear shift from forward to reverse.
- 6) TWIN SCREW BOAT: Approach the dock in the same manner as a single screw boat. As the bow is within a few feet of the dock (starboard side) the stern can be brought along side the mooring by reversing the port engine and putting the starboard engine in forward. These procedures are reversed for docking to port.

# Section III

# Parts and Systems-Operation and Maintenance

#### A. Electrical Systems

Although Bayliner manufactures many different models, the electrical systems on all models operate on the same basic theory. The key to a good marine electrical system is the battery. The batteries on Bayliner power boat models 1750 through 2750 are a dealer-installed item. Bayliner makes the following recommendations on battery rating:

Models 1750 through 2250 (4 cylinder) — minimum 60 amp/hour capacity.

Models 2050 through 2750 (8 cylinder) — minimum 80 amp/hour capacity.

Models with AQD-40 Volvo diesel — minimum 114 amp/hour capacity.

On all models 2250 through 2850, Bayliner recommends dual batteries with a vapor proof switch. Consult your dealer about this option.

The marine battery has a big job. It supplies you with lights, engine starting power and power to run many accessories. Don't neglect it! 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 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. Do not store on a cement floor.

## 2) Fuses

The fuse blocks on all models 1500 through 2850 are located on the back side of the dash panel. The fuse block is color coded to the accessories. 10 amp fuses are used on all accessories, with the exception of the blowers on 2750 and 2850 Command Bridge Boats. These use a 14 amp fuse.

On these models 2250 through 2550 equipped with the optional electric refrigerator, an in-line fuse is located in the motor compartment at the battery.

On models 2050 through 2850 equipped with trim tabs, the trim tab pump motor is protected by a 15 amp fuse located in-line at the batteries.

#### 3) Dockside Power

On those models 2250 through 2550 equipped (standard or optional) with dockside power, the dockside circuit breaker box is generally located in the head compartment. The circuit breaker on the 2750 Victoria Sun Bridge is in the aft cabin; on the 2750 Victoria Command Bridge it's under the port lounge, main cabin; on the 2850 Bounty it's in the galley. The circuit breakers are marked as to what accessories they protect.

CAUTION! Before plugging into shore power you should always check the phase of the shore power. A phase tester can be purchased at any electrical supply store and should be plugged in to one of the 110 volt outlets on your boat. When you plug in dock side, check the phase tester. If your boat outlet is not in phase with the shore power, disconnect your dockside plug. Failure to make this check can result in damage to your 110v accessories.

When using shore power, all circuit breakers should be in the "ON" position. The 110v accessories and wall outlets can then be used.

On these models equipped with a generator (standard or optional), the generator transfer switch should be in the "SHORE POWER" position.

## 4) 110v/12v refrigerator

On those models equipped with the Norcold 110v/12v refrigerator, when the dock side is plugged in this accessory automatically switches over to 110 volts. When the dockside power is unplugged, it automatically switches back to 12 volts. On 12 volts, it is advisable to turn the refrigerator off at night. If you're mooring in one place for more than one day and have your refrigerator running constantly, you should start and run your engine(s) every day for 15 minutes or so at 1500 rpm or higher. This will help keep your battery(s) up. When running on 12v DO NOT set cold setting above "2". This will also help preserve your battery's power.

#### 5) Hot water heater

On 2750 models the hot water heater is hooked up to dockside power only. On models 2850 through 4050 the hot water heater is hooked up to dockside plus hot water from the boat engines' cooling system. Hot water circulating from the boat engines will help to maintain the water temperature in the hot water tank. The hot water tank, which holds approximately 5 gallons, is equipped with a thermostat and a reset button. These are located under the square removable plate on the tank itself.

CAUTION: When the water system has been run dry, the hot water must be shut off immediately or the 110v heating element will be damaged. On the 2750 and 2850 this is done at the dock-side power circuit breaker box.

6) Generator (Optional on models 2750 and 2850)

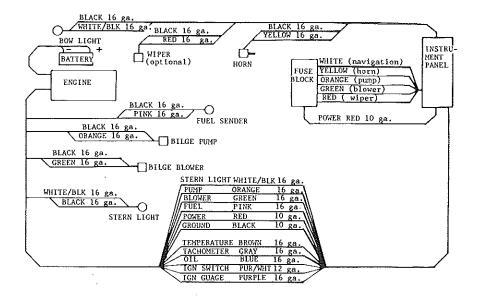
To operate the generator, the following procedure should be followed:

- (a) open motor hatch.
- (b) check oil level in generator.
- (c) open seawater intake to generator.
- (d) turn on fuel valve.
- (e) toggle switch on generator should be in "off" position.
- (f) turn the generator transfer switch to "GENERATOR".
- (g) turn generator toggle switch in cabin to "on" and the generator will start.

When the generator starts there will be power to all 110 volt accessories and outlets. The refrigerator automatically switches to 110 volts.

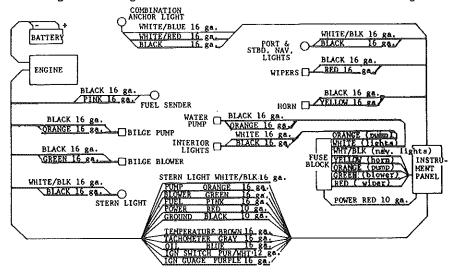
# **Diagram of Electrical System**

1750 Mutiny 1750 Mutiny Bowrider 1850 Cutlass 1950 Quartermaster/Bowrider 2050 Admiralty/Bowrider 2050 Admiralty Cuddy



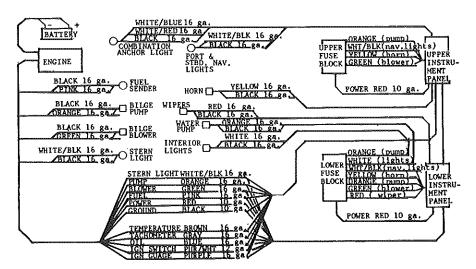
# **Diagram of Electrical System**

2150 Liberty 2200 Santiago Cuddy/Fisherman 2200 Santiago Offshore 2250 Skagit Sun Bridge 2550 Saratoga Express 2550 Saratoga Offshore 2550 Saratoga Sun Bridge 2750 Victoria Sun Bridge



# Diagram of Electrical System

2350 Nisqually Command Bridge 2550 Saratoga Command Bridge 2750 Victoria Command Bridge 2850 Bounty Command Bridge



#### B. Fuel Tanks

Bayliner power boats 1750 through 2750 (dual or single engine) are equipped with a single fuel tank. In all cases the fuel tank is mounted amidships under the cockpit sole. The tank is equipped with an automatic antisiphon valve. Fuel pump pressure opens the valve and when the engine is shut off the valve closes. On models 1750 through 2750 the antisiphon valve is used in place of a manual shutoff valve and meets Coast Guard requirements.

The Bayliner 2850 (dual or single engine) is equipped with a single fuel tank. The tank is located under the salon floor. The tank is equipped with an antisiphon valve and a manual shutoff valve (two of each in the case of dual engines). The manual shutoff valve(s) are located in the engine compartment. Access to the fuel tank can be gained through the engine compartment.

The antisiphon valve on all models is the first fitting coming out of the fuel tank on the fuel feed line to the engine. These valves may occasionally malfunction due to a faulty valve or contaminated fuel. In an emergency the valve can be removed and the ball check system driven from the center of the valve using a punch and a hammer. To do this, insert punch at the end opposite the retaining ring for the ball. Do not attempt repair of the valve—replace it with a new one. A fuel starving situation usually indicates a plugged fuel filter or a faulty antisiphon valve.

Several of the Bayliner models, particularly runabouts, have long flat tanks. The boat must be in a fairly level attitude to fill the tank to capacity or to get a correct reading from the fuel gauge. Bayliner 2350 and 2750 dual station models are equipped with one fuel gauge. This is located at the lower station.

# 1) Fuel Capacity Table

Model	Tank Part Number	Rated Capacity (Gallons)
1750 Mutiny	42550	20
1850 Cutlass	42550	20
1950 Quartermaster/Bowrider	42606	40
2050 Admiralty/Bowrider/Cuddy	42606	40
2150 Liberty	42606	40
2250 Santiago Cuddy/Fisherman/		
Offshore	42777	56
2275 Skagit Sun Bridge	40039	68
2350 Nisqually Command Bridge	40487	70
2550 Saratoga Offshore	42759	90
2550 Saratoga Command Bridge	42741	94
2550 Saratoga Sun Bridge	40726	95
2550 Saratoga Express	41431	101
2750 Victoria Sun Bridge	41356	120
2750 Victoria Command Bridge	42741	94
2850 Bounty Command Bridge	41508-473	140

NOTE: usable amount of fuel in each tank is approximately 90% of rated tank capacity. Fuel planning for longer voyages should take this factor into account. Boats must be in a fairly level attitude to fill tank to capacity or to get a correct reading from fuel gauge.

# C. Freshwater System

The freshwater systems in Bayliner cruiser models vary in tank size and location.

Manual pumps work on a push-pull basis.

ion Table
Location
Capacity,
Freshwater
-

Tank Model	Size	Tank Location	Pump Type	Fill Location
2150 Liberty	3 gal.	in galley cabinet	manual	portable tank
2250 Santiago Offshore/Fisherman	19 gal.	under bow cushions	manual	under bow cushions
2275 Skagit Sun Bridge	19 gal.	under bow cushions	manual	under bow cushion
2350 Nisqually Command Bridge	19 gal.	under bow cushions	pressure demand system	under starboard bunk cushion
2550 Saratoga Offshore	20 gal.	under cockpit floor	manual	on tank
2550 Saratoga Command Bridge	20 gal.	under cockpit floor	pressure demand	port deck aft of cabin
2550 Saratoga Sun Bridge	19 gal.	under bow cushions	manual	under port bow cushion
2550 Saratoga Express	19 gal.	under bow cushions	pressure demand system	under starboard bunk cushion
2750 Victoria Sun Bridge	19 gal.	under bow cushions	pressure demand system	under starboard bunk cushion
2750 Victoria Command Bridge	36 gal.	under salon floor	pressure demand system	starboard deck amidships
2850 Bounty Command Bridge	40 gal.	under saion floor	pressure demand system	port deck forward

Pressure systems operate at any time the electrical switch is on. When not using the boat, or when tank is dry, be sure the switch is off. Pressure pump switches are located in the galleys on all models. On those models with showers, the shower stall sump pump switch is located in the head. Because the shower floor is below the waterline, a sump pump must be used to remove shower water.

#### D. Starter Motor

The engine starter motor is electronically different from most motors. It is designed to deliver high horsepower for very short intervals only. Avoid operation for more than 30 seconds at one time. Due to its high horsepower, this motor builds up considerable heat and can be permanently damaged with prolonged use. If it does not operate, check battery for charge and all direct connections for shorts or loose connections. The starter motor is located very near the bilge of your Bayliner. If bilge water is allowed to accumulate to a depth of more than six inches, the starter can be damaged. Automatic bilge pumps are recommended for boats left in open moorage.

#### E. Bilge Blower

The bilge blower is a factory installed item designed to clear the bilge area of gasoline fumes. In essence, it is a squirrel cage type electric fan which sucks out engine compartment air and causes fresh air to circulate into the compartment through the deck vents.

The bilge blower is designed to be used before starting the engine, during starting and while the boat is operating below cruising speed to insure fresh air circulation. Operate blower for 3 minutes before starting engine.

NOTE: The blower will not prevent explosion. If you smell gas, shut off all electrical accessories and engine and investigate immediately. If the blower does not operate, check fuse and check lead wires.

F. The electric bilge pump supplied with your Bayliner is of an impeller type. If you see water and the pump motor is running but not pumping, check to see that it is not clogged by debris. If it still does not pump, check the discharge hose for kinks or a collapsed area.

NOTE: The federal water pollution control act prohibits the discharge of oil or oil waste into or upon the navigable waters and contiguous zone of the United States if such discharge causes a film or sheen upon, or discoloration of, the surface of the water, or causes a sludge or emulsion beneath the surface of the water. Violators are subject to a penalty of \$5,000.

#### G. Running Lights

If the night lights or navigation lights supplied with your Bayliner fail to operate:

- 1) You may have blown a fuse. (Replace fuse behind dash panel.)
- The bulb may be burned out. (Carry spare bulbs for replacement.)
- 3) The bulb base may be corroded. (Clean periodically as required and coat with non-conductive grease or vasoline.)
- A wire may be loose, due to vibration or mis-stowed gear. (Repair where break occurred.)

NOTE: Prolonged operation of cabin interior lights (overnight) will result in a dead battery. Be conservative in the use of battery power.

#### H. Windshield Wiper

The wiper motor supplied with your Bayliner, like all good equipment, requires some maintenance. Do not increase the size of the wiper arm. The manufacturer has engineered the motor for that exact load. If the wiper does not operate:

- 1) Check fuse
- 2) Check switch
- 3) Make sure wiper arm is securely attached to motor

## I. Head Operation

1) Portable heads:

#### POTPOURRI To use:

- Mix 1½ to 2 gallons of water with four ounces of Liquid Gold concentrate and pour the mixture through the opening of the basin, while operating the flushing handle on the side.
- 2. Pump the liquid into the basin, and push on the flush handle. Repeat the operation to assure perfect mixing.
- Before using, it is always necessary to pump liquid into the basin.
- 4. Keep the basin dry when running.

NOTE: Use only white tollet tissue as colored dies may impair the effectiveness of the chemical. Use regular ply tissue. Do not use disintegrating tissue as this may clog the entire pump system.

#### Cleaning:

Use only mild cleansers, detergents or soaps. Avoid using abrasive cleansers. Clean the toilet bowl periodically as you would your household toilet.

## To empty:

- The Potpourri is designed to be carried like a suitcase by the handle on the back of the head. In many cases the head must be held in suitcase fashion to remove it from the head compartment. You are cautioned not to overfill the head. If the head is overfilled it can't be tipped up for removal from the head compartment.
- To empty the portable model into another toilet, remove the pourspout cap at the rear right-hand corner and connect the hose adapter with an adequate length of three-inch (7.62 cm) flexible sewer hose clamped on to submerge the hose below the waterline in an existing toilet bowl.
- 3. Gradually tilt the unit to drain out.
- 4. After emptying, flush a half pail of clear water into the holding tank and swirl contents to rinse out. Repeat if necessary.
- To use toilet again recharge with ¼ bottle of Liquid Gold as done originally.

NOTE: There are many brands of tollet chemicals, any of which will work very well in any of the portable tollets supplied by Bayliner.

#### SEA FARER

The Sea Farer is divided into two basic components. The top section consists of the seat, seat cover, flushing bellows, bowl and freshwater storage chamber. The lower section consists of an odor-tight, gastight seal; and the holding tank for waste storage.

# Preparation:

 Set the unit on the ground. Tilt unit forward, then remove the large threaded cap from the lower rear of the unit and pour in ½ bottle of Aqua Kem Concentrate to control odor and prevent gaseous buildup within the holding tank. Replace and tighten cap.  Unsnap the cap on the top, back of the unit and fill the tank to the specified level with fresh water. DO NOT POUR ODOR CON-TROL CHEMICALS INTO THIS SECTION. Replace the cap.

#### To use:

- If you wish to add water to the bowl before using, depress the flushing bellows. To flush after use, depress the flushing bellows one or more times and raise the valve handle. Water and waste in the bowl will pass into holding tank. For the most efficient use and conservation of water, it is recommended that you raise the valve handle and depress the bellows simultaneously to flush.
- 2. Should the holding tank become overfilled, tilt the toilet back slightly and open the valve.

#### To Empty:

- The holding tank of the Sea Farer is ready to empty when the holding tank contents approach the level of the blade of the mechanical seal. Carry the unit to any permanent toilet facility.
- 2. Tilt forward. Remove the large threaded cap on the lower right and pour the contents into a toilet.

#### Trouble Shooting:

Symptom: Valve operates harder than normal or the blade sticks. Cure: Apply a light film of silicone spray to blade.

2) Marine head with holding tank (optional):

The marine head with holding tank is designed so waste may be flushed into the holding tank or, for those traveling offshore and beyond federally regulated waterways, flushed overboard. This is accomplished by routing the head discharge hose through a "Y" connector to the holding tank and also overboard. There are valves in each of these lines. To flush waste overboard the gate valve to the tank must be closed and the thru-hull seacock should be open. To flush into the holding tank, close the thru-hull seacock and open the gate valve to the holding tank. To empty the holding tank the boat must be taken to a pump out station.

To operate the marine head, open the sea cock on the sea water intake. Before using, pump some water in to wet the bowl. After using, pump until thoroughly cleansed. Pump a few more times to clean lines. If excess waste should cause water to rise in bowl, stop pumping until water recedes. If at any time you are unable to pump water into the bowl, the probable reason is debris sucked into pump diaphragm. To remedy, shut inlet sea cock, and dismantle pump. Pump is generally held together with six screws. The design is simple and the problem will be obvious when pump body is split open. To winterize toilet, shut off intake valve.

Pump until dry. Remove drain plug in base. Pump again to remove all water. Do not use antifreeze. The inlet sea cock should be closed while the boat is under way or when the boat is left moored in the water. The following chart will help you locate the holding tank and valves in your Bayliner.

1	1	. , , , , , , , , , , , , , , , , , , ,	t Daymion.	
· Model	Location Of Holding Tank	Location Of Inlet Sea Cock	Location Of Overboard Discharge Sea Cock	Location Of Holding Tank Gate Valve
2250 Skagit Sun Bridge	in head	in motor compartment	in head	in head
2350 Nisqually Command Bridge	port side motor compartment	in head	port side motor compartment	port side motor compartment
2550 Saratoga Offshore	under head	ìn head	under starboard V-berth	in head
2550 Saratoga Sun Bridge	in head	in motor compartment	in head	in head
2550 Saratoga Express	in motor compartment	in head	in head	in head
2550 Saratoga Command Bridge	engine compartment	engine compartment	engine compartment	on the holding tank
2750 Victoria Sun Bridge	in head	access hatch in floor adjacent to galley	in head vanity	in head
2750 Victoria Command Bridge	in starboard lounge seat base	access hatch in floor adjacent to galley	in starboard V-berth storage locker	in head
2850 Bounty Command Bridge	in motor compartment	in motor compartment	in motor compartment	in motor compartment

# J. Alcohol Stoves

Read carefuly and follow the operating instructions. Use only stove alcohol labeled specifically for marine stove use. Do not operate stove while under way.

#### To fill:

Unscrew filler cap. Fill tank with denatured ethyl alcohol using a funnel. Replace cap. The filler cap is equipped with a safety valve and must not be replaced by any other type of cap.

#### To start:

Pump approximately 20 times to pressurize fuel tank. Pump is located at front of stove.

#### To operate:

Burners must be preheated to produce vaporized alcohol. Slowly open (counterclockwise) one burner at a time to allow alcohol to flow into priming cup below the burner body. Fill priming cup ¾ full (about ¼ ounce). Shut off burner (clockwise) and ignite priming alcohol. When this alcohol is fully consumed, turn control knob toward open position and light burner.

CAUTION: All alcohol spilled while filling tank or as a result of priming cup being filled to overflowing should be cleaned up prior to lighting alcohol stove. Follow starting instructions above carefully. Flare-up may occur during preheating, particularly if burner valve is opened before preheating is completed. If flare-up occurs, shut off burner and restart per instructions. DO NOT PUT COOKING UTENSILS ON STOVE UNTIL BURNERS ARE FUNCTIONING PROPERLY.

#### To shut off burner:

Turn control knob to extreme right. Release pressure in tank by loosening filler cap.

Bayliner's 2750 and 2850 models are equipped with remote alcohol tanks. The tank is in the galley cabinet. Each of these models is equipped with a small tire pump for pressurizing the tank. A pressure gauge and pump valve are on the tank itself. To pressurize, make certain stove control knobs are in the off position, then pump the tank pressure to 15 psi. As the stove is used, check and maintain this pressure.

- K. Loading limits: hardtops, cabin tops, command bridges Hardtops and cabin tops are of fiberglass reinforced with balsa. They are designed to be lightweight for proper boat balance and carry the following load limits: Sedan model not to exceed 500 pounds; Express cruiser hardtops not to exceed 80 pounds; Command bridge model not to exceed 500 pounds (2350 and 2550), 600 pounds (2750), 700 pounds (2850 and larger). These are maximum limits for boats carrying a normal complement of fuel and gear. Boats with a lighter load should carry less weight than states maximum in critical areas noted above.
- Transom platforms carry the following load limits: Weight not to exceed 250 pounds.
   Auxiliary engine not to exceed 7½ horsepower.

# Section IV

# **Underway Operating Instructions**

While under way, check instruments frequently. They are the advance warning system that will enable you to avoid troublesome malfunctions.

#### A. Instruments

- Tachometer—All tachometers are of the electric type, indicating engine revolutions per minute (rpm) in 100's. On twin engine installations or dual station models, the tachometers may have a slightly different reading. This is normal.
- 2) Temperature Gauge—The temperature gauge indicates engine coolant temperature by monitoring a signal from a sending unit installed in the engine water jacket. The sender changes resistance value as its temperature changes. This changing resistance value is then measured by the instrument. When gauge reads in the danger area, shut the engine off and diagnose the problem. A common cause of overheating is picking up a foreign object on the water intake. Usually, raising and lowering your outdrive will free it of the foreign object. On those twin engine powered boats equipped with a hot water system whereby the cooling system of one engine is plumbed through the hot water tank to heat fresh water, the temperature gauge(s) for that engine will read a different operating temperature than the other engine.
- Oil Pressure Gauge—The oil pressure gauge indicates pressure by monitoring a signal from a sending unit. When gauge reads in the danger area, shut the engine off and diagnose the problem.
- 4) Fuel Gauge—The fuel gauge indicates fuel level. Since boats are many times exposed to rough water conditions and varying trim, fuel gauges may provide inaccurate readings at times. It is always wise to keep track of your running time as a double check against an inaccurate gauge.
- 5) Hour Meter (Optional)—The hour meter measures engine running time. It is an aid to maintenance and warranty requirements. The meter has a range of 10,000 hours with automatic recycle.

#### B. Boat Performance

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

- Loading: take with you only the necessary equipment. As you
  add weight to your boat, it slows down. Keep weight low in the
  boat and balanced.
- 2) Propeller: keep it in good repair and correct pitch for your particular situation. The factory standard equipment propeller may not be the best one for your particular boat and load conditions. The engine should be able to come up to its rated rpm on a normally loaded boat. If the engine rpm runs too slow, try a prop of less pitch. If the engine overspeeds, efficiency is also lost; try a prop of greater pitch.

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

3) Weeds, barnacles and other growth: keep your boat bottom free of these. When your boat starts "growing grass" it will slow down greatly, even to the point where it will not plane. Anti-fouling paint that does not contain mercury or copper additives is recommended. Base materials, such as copper, will accelerate electrolysis and damage your lower unit's aluminum housing.

Marine growth varies from one area to another so it is best to consult your dealer for the best bottom paint for your particular area.

#### C. Boat Running Attitude

- If your boat runs with its bow too high at cruising speeds, the following suggestions will help you lower the bow:
  - a. Move weight forward in the boat.
  - b. Install trim tabs (optional equipment). See Section D below.
  - c. Adjust thrust angle of engine.
    - OMC: adjust forward motor mount. Extending screw will bring bow down.
    - 2. Volvo or outboard motors: move tilt pin in transom plate to the closest hole to the boat.
    - 3. MerCruiser: run trim in "down" or "in" position.
  - d. If your boat runs with its bow too low at cruising speeds (usually indicated by water coming off the hull way forward and the boat being difficult to steer—veering off), you can raise the bow by:
    - a. Moving weight aft.
    - b. Not using trim tabs.
    - c. Adjusting engine thrust angle.
      - OMC: adjust forward motor mount. Lowering the front of the engine (by screwing down the forward mount) will lift the bow of the boat.
      - Volvo or outboard motors: move tilt pin out away from the transom, one hole at a time.
      - 3) MerCruiser: run power trim in "extended" or "out" position with small adjustments.

## D. Trim Tabs (Optional)

Trim tabs are intended for corrections to boat trim on the port and starboard axis with very minor changes in pitch or fore-and-aft attitude. For major corrections, redistribute loads.

- 1) If tab position is unknown, when idling away from the dock, put your tab on the full bow-up position.
- 2) After power is applied and boat is at cruising rpm, push appropriate tab button to level the boat on lateral axis. Several short touches of the tab button are recommended. Allow the boat to react to the new position of the trim tab after each touch. When installed under manufacturer's recommendation, the port button on the trim tab switch operates the starboard trim tab and vice versa.
- Both tabs can be lowered slightly to lower bow. Forcing the bow down with tabs will cause steering difficulty and a loss of efficiency.
- 4) When running in a following sea, run tabs in full bow-up position.

CAUTION: Do not use tabs in a following sea as they may cause broaching. Do not allow those unfamiliar with trim tabs to operate your boat without advising them explicitly in the use of tabs, or instructing them to 'Keep hands off". Inexperienced operators can create a potentialy dangerous situation by incorrect operation of trim tabs.

# E. Operating Dual Station Boats

Always start the boat at the station from which you will be operating. This eliminates the possibility of having someone inadvertantly turn off the ignition; also, if the engine stalls you are able to start it immediately. 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 and take your keys with you. Never leave the helm while the boat is underway and assume that 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.

#### F. Steering Wheel Pressure

All stern drives can be adjusted so there is no pull on the wheel at one given speed or trim angle. We suggest your normal cruising speed. This is done by turning a trim tab on the gear case in the direction the wheel is pulling. Small adjustments should be made until the steering has neutral torque at the speed you desire. When running faster or slower than this speed, a minimal amount of torque will be present.

#### G. 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 boats 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.

Batteries have a big effect on static float attitude of a boat. Move batteries to light side if required.

Deep-V boats ride well in rough water; however, they are more critical in balance than flatter bottom boats. Loading and placement of gear and passengers have a great effect on attitude and balance of a deep-V boat.

#### H. Tips for Boat Owners

- 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 as they will best protect your boat from floats, piers and other boats.
- 3) Carry adequate line properly sized to your boat. A minimum of two 30' lengths of %" nylon line should be aboard on models 1750 through 2050; three 30' lengths of %" nylon on 2150 through 2350; and four 50' lengths of ½" line on 2550 through 2850.
- Be courteous to other boats. Slow down in congested areas and watch that your wake does not damage other boats.

# I. Boating Safety Courses

Your local U.S. Coast Guard 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 Guard Auxiliary or Power Squadron Flotilla for the time and place of the next class.

# **Section V**

# General Maintenance and Repairs

#### A. Fiberglass Staining and Discoloration

These problems can generally be removed by many of the fine fiber-glass cleansers available. However, they take elbow grease. For best results follow the manufacturer's recommendations. If the marine products are not available in your area, try the new liquid household cleaners such as 409, Ajax liquid, Fantastik or others. Caution: Household cleaners with abrasives will dull the finish on your boat. If this occurs, wax and buff the area to restore luster.

#### B. Hardware Cleaning

Use nearly any of the modern chrome 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 every three months when exposed to salt water and annually in fresh water. If not maintained on a regular basis, stainless steel railing and fittings, in particular, will discolor because of surface carbon steel granules picked up in processing and, in some areas, because of contaminants carried in the air.

# C. Vinyl Upholstery

Use any good automotive vinyl cleaner; cleaner concentrates such as Fantastik work well also. Caution: Avoid solvents and bleaches, as they may permanently damage the vinyl.

# D. Vinyl Flooring

Use one of the liquid cleaners mentioned previously and a scrub brush. Rinse thoroughly to avoid slickness when wet.

# E. Structafoam Swim Platform and Steps

These clean well with a spot remover made for rugs and carpets.

#### F. Teak

To keep teak looking fresh, it should be well oiled 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 sandpaper.

## G. Repairing Fiberglass, Gelcoat Chips, Gouges and Scratches

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 Gelcoat surface, use automotive rubbing compounds. Dampen a soft rag or use a power buffer. Apply rubbing compound with plenty of elbow grease. The scratch may not disappear completely; however, its noticeability will decrease.
- Gouges 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.
  - Using a small portion of patch paste on a piece of cardboard, mix thoroughly with catalyst (two or three drops of catalyst to a tablespoon of paste).
  - Apply to pit, chip or gouge with a single-edged razor blade to match the surface and contour of the area being repaired. (It's better to have an excess than not enough on the patch.
  - Allow to harden thoroughly. In most climates, one or two hours should be sufficient.
  - e. Shape the patch to desired thickness, using fine wet sandpaper on a sanding block.
  - f. Finish using automotive rubbing compound in the same manner as for scratches.

# H. Saltwater Special Care

If permanently moored in salt water your boat will collect barnacles and grass on its bottom. This will detract from the boat's beauty and greatly affect its performance. There are two methods of preventing this:

- 1) Periodic haulout and cleaning. (About every 30 to 45 days use soap and water and plenty of elbow grease.)
- 2) Coating with antifouling paint. A chemical toxic base—which does not contain copper or mercury—works best on fiberglass hulls. All paints require special preparation of the fiberglass finish. For best results, contact your Bayliner dealer or your marine paint dealer.

#### L. Underwater Corrosion

Stray current corrosion or electrolysis can best be compared to electroplating of chromium or brass, with the salt water acting as the electrolyte and the battery acting as the source of direct current.

Electrolysis can be prevented in several ways. The following are the most common causes and the simplest cures for the problem:

- Keep a clean, dry bilge. Wiring may leak a certain amount of electricity.
- A poorly grounded zinc anode; check ground wire or clean contact surfaces.
- 3) The zinc anode may be deteriorated beyond effectiveness; replace, usually at 50% loss.
- 4) If extremely fast deterioration is occurring, it may be wise to install electronic protection such as Mer-cathode.

#### Cabin Windows and Windshields

Salt and brackish water are capable of etching and damaging glass. Keeping windows clean is the best preventive measure you may take.

### K. Window Leakage

Cabin window leakage is uncommon; but if it does occur, it is simply remedied.

- 1) Mark the leak using crayon or other nonpermanent marking.
- Dry thoroughly. You might have to wait for a dry day. Sealer will not bond if moisture is present.
- 3) Coat area with silicone-type rubber sealant.
- 4) Allow sealant to dry well, then check by sprinkling with a hose. (Cabin window or windshield leakage is not covered under the Bayliner Warranty.)

Under way, whether trailering or in the water, be sure to use the antirattle snubbers to secure windows in place, open or closed.

### L. Convertible Tops and Back Covers

Convertible tops can be cleaned using a regular vinyl cleaner. Vinyl cleaners may be obtained in grocery stores or auto parts houses. To prevent rainwater seepage at the canvas seams, a coating of Scotch Guard 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 won't 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.

#### M. Instruments-Care and Service

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 using your instruments in a saltwater environment, salt crystals may form on the bezel and the plastic dial. 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 crystal bright and clean.

## Section VI

# Winterizing

If your boating season has ended or cold weather is setting in, follow these suggestions:

- Drain the engine block and manifolds. Frozen water expands and can crack your engine. Consult your engine owner's manual for location of drains. There can be drains on the block and manifolds.
- Drain the outdrive of water and change outdrive lubricant. Your dealer can perform this service for you at minimal cost.
- Store boat, if outside or in an unheated area, with the bow higher than the stern to allow any condensation of water to run out. Remove the transom drain plug.
- Consult operating instruction provided with your head (toilet) for winterizing. Drain self-contained heads.
- 5) Drain water tanks to avoid freezing and insure fresh taste in the spring. Be sure to drain accumulated water in the pump to avoid damage due to freezing. This is best accomplished by running the pump until empty.

On those boats equipped with hot water tanks, remove the drain plug on the tank after all the water has been pumped out of the regular water tank(s). On those models whose engine cooling water circulates through the hot water tank, the hoses carrying this water must be disconnected at the engine and blown out.

- 6) Gasoline tanks should be kept completely full. With full tanks, there is little air space to allow condensation, a major cause of sludge and gum that eventually create problems.
- Remove the marine battery from your boat. Fill the cells to proper level and store in a warm dry place. Do not store on a cement floor. A fully charged battery will survive storage better.
- 8) Lubricate control and steering push-pull cables.
- Clean the boat thoroughly. Coat deck hardware and other metallic parts with a rust inhibitor.
- 10) Your boat should be stored inside during winter if possible. If outside storage can't be avoided, a special cover should be used. Use of the standard vinyl top as a winter storage cover will cause rapid deterioration of these parts. Heat should be kept in the boat to avoid dampness and adequate flow-through ventilation should be assured. Lack of ventilation will cause mildew.

- 11) Bunk cushions and dinette cushions may be left aboard; however, they should be stored on edge with plenty of ventilation.
- 12) If storing on a trailer:
  - a. Now is a good time to repack wheel bearings. Your local automotive service shop can help you.
  - Block the trailer wheels off the ground to avoid tire deterioration.
  - c. Loosen stern tiedowns to avoid stress on hull.
  - d. Store in a bow-high position for drainage.
  - e. Touch up trailer paint.

We hope the above preventive measures will help make a spring get-ready less work. However, don't forget to consult your dealer as well as the engine owner's manual for engine winterizing requirements.

NOTE: Bayliner cannot sell accessories or other items directly to the public due to production commitments and dealer franchising. Our dealers normally stock many of our accessories or can supply you with them in a short time.

# Section VII

## **Propeller Recommendations**

Variances in operating altitudes (highland lakes vs. sea level) and loads can affect performance. Changing to a propeller of a different size and pitch can often compensate for the effects of increased load or altitude, and insure peak performance.

The following propeller chart lists a recommended propeller for some model and engine combinations. These recommendations are based on operation at sea level with two persons and a light load in all boat models 1750 through 2050. Recommendations for models 2150 through 2750 are based on sea level operation with four persons and a light load.

Generally, for every 2500 feet above sea level, it is advisable to decrease propeller pitch two inches from the recommendations listed.

Every attempt has been made to equip your Bayliner with a propeller that will optimize performance. Your boating needs, however, may make a different propeller desirable. Your Bayliner dealer can help you in the selection of a propeller best suited to your uses.

On those high performance Bayliner models capable of speeds in excess of 50 mph, cavitation burn may be experienced on the propeller. High performance propellers constructed of bronze or stainless steel are available from propeller manufacturers, but using these could void the warranty on your drive unit. Props on these boats should be checked frequently for cavitation burn if the boat is continuously operated at high speeds. Replace propellers as necessary when severe burn occurs.

MODEL/ENGINE	PROP	PINHOLE (VOLVO ONLY)	ROTATION
1750 Mutiny			
120 Volvo	15 x 19	2	Left
120 Merc	21 A4	P/T	Right
140 Volvo	15 x 19	2	Left
140 Merc	21 A4	P/T	Right
1850 Cutlass			•
120 Volvo	15 x 19	2	Left .
120 Merc	21 A4	P/T	Right
140 Volvo	15 x 19	2	Left
140 Merc	21 A4	P/T	Right
170 Merc	23 A4	P/T	Right

MODEL/ENGINE	PROP	PINHOLE (VOLVO ONLY)	ROTATION
1950 Quartermaster 1950 Quartermaster Bow 120 Volvo 120 Merc 140 Volvo 140 Merc 170 Merc	/master 15 x 19 21 A4 15 x 17 21 A4 23 A4	2 P/T 2 P/T P/T	Left Right Left Right Right
2050 Admiralty 2050 Admiralty Bowrider 2050 Admiralty Cuddy 120 Volvo 120 Merc 140 Volvo 140 Merc 170 Merc 200 Volvo 225 Volvo 198 Merc 228 Merc	15 x 17 19 A4 15 x 17 21 A4 23 A4 15 x 21 15 x 21 21 A4 21 A4	1 P/T 2 P/T P/T 2 2 P/T P/T	Left Right Left Right Right Left Left Right Right
2150 Liberty 120 Volvo 120 Merc 140 Volvo 140 Merc 170 Merc 200 Volvo 198 Merc 225 Volvo 228 Merc	15 x 17 17 A4 15 x 17 17 A4 21 A4 15 x 17 21 A4 15 x 19 21 A4	2 P/T 2 P/T P/T 2 P/T 2 P/T	Left Right Left Right Right Left Right Left
2250 Santiago Offshore 2250 Santiago Cuddy 2250 Santiago Fishermai 2250 Santiago Offshore 120 Volvo 120 Merc 140 Volvo 140 Merc 170 Merc 200 Volvo 225 Volvo 198 Merc 255 Volvo 260 Merc		1 P/T 2 P/T P/T 2 2 P/T P/T 2	Left Right Left Right Right Left Right Right Left

MODEL/ENGINE 2250 Skagit Sun Bridge	PROP	PINHOLE (VOLVO ONLY)	ROTATION
200 Volvo 225 Volvo 198 Merc 228 Merc 255 Volvo 260 Merc	15 x 19 15 x 19 17 A4 17 A4 15 x 21 21 A4	2 2 P/T P/T 2 P/T	Left Left Right Right Left - Right
2350 Nisqually Command 200 Volvo 225 Volvo 198 Merc 228 Merc 255 Volvo 260 Merc 130 Volvo Diesel	d Bridge 15 x 17 15 x 17 17 A4 17 A4 15 x 21 19 A4 16 x 17	2 2 P/T P/T 2 P/T 2	Left Left Right Right Left Right Right
2550 Saratoga Offshore 200 Volvo 225 Volvo 198 Merc 228 Merc 255 Volvo 260 Merc 130 Volvo Diesel T-120 Volvo T-120 Merc T-140 Volvo T-140 Merc T-170 Merc	15 x 17 15 x 19 15 A4 15 A4 15 x 21 17 A4 16 x 15 15 x 19 17 A4 15 x 17 17 A4 21 A4	2 P/T P/T 2 P/T 2 2 P/T 2 P/T 2	Left Left Right Right Left Right Left Left/Right Right/Right Right/Right Right/Right Right/Right Right/Right
2550 Saratoga Sun Bridg 200 Volvo 225 Volvo 198 Merc 228 Merc 255 Volvo 260 Merc 130 Volvo Diesel T-120 Volvo T-120 Merc T-140 Volvo T-140 Merc T-200 Volvo T-170 Merc	e 15 x 17 15 x 19 15 A4 15 A4 15 x 21 19 A4 16 x 17 15 x 19 19 A4 15 x 17 19 A4 15 x 21 23 A4	2 P/T P/T 2 P/T 2 2 P/T 2 P/T 2 P/T	Left Left Right Right Left Right Left/Right Left/Right Right/Right Left/Right Right/Right Right/Right Right/Right Right/Right Right/Right
2550 Saratoga Express 2550 Saratoga Command 200 Volvo 225 Volvo	Bridge 15 x 17 15 x 19	1 1	Left Left

MODEL/ENGINE	PROP	PINHOLE (VOLVO ONLY)	ROTATION
198 Merc 228 Merc 255 Volvo 260 Merc 130 Volvo Diesel T-120 Volvo T-120 Merc T-140 Volvo T-140 Merc T-170 Merc	15 A4 15 A4 15 x 21 17 A4 16 x 15 15 x 19 17 A4 15 x 17 17 A4 21 A4	P/T P/T 1 P/T 2 1 P/T 2 P/T P/T	Right Right Left Right Left Left/Right Right/Right Left/Right Right/Right Right/Right
2750 Victoria Sun Bridge 225 Volvo 228 Merc 255 Volvo 260 Merc T-120 Volvo T-120 Merc T-140 Volvo T-140 Merc T-200 Volvo T-170 Merc T-225 Volvo T-228 Merc T-255 Volvo	15 x 17 15 A4 15 x 21 17 A4 15 x 17 17 A4 15 x 17 17 A4 15 x 21 21 A4 15 x 21 21 A4 15 x 23	1 P/T 1 P/T 1 P/T 1 P/T 2 P/T 2 P/T 2	Left Right Left Right Left/Right Right/Right Left/Right Right/Right Left/Right Right/Right Left/Right Left/Right Left/Right Left/Right Right/Right Left/Right
2750 Victoria Command 225 Volvo 228 Merc 255 Volvo 260 Merc 130 Volvo Diesel T-120 Volvo T-140 Volvo T-140 Merc T-170 Merc	15 x 17 15 A4 15 x 19 17 A4 16 x 15 15 x 17 15 x 17 17 A4 21 A4	1 P/T 1 P/T 1 1 1 P/T	Left Right Left Right Left Left/Right Left/Right Right/Right Right/Right
2850 Bounty Command 255 Volvo 260 Merc T-200 Volvo T-170 Merc T-198 Merc T-225 Volvo T-228 Merc T-255 Volvo T-130 Volvo Diesel	Bridge 15 x 19 15 A4 15 x 17 19 A4 17 A4 15 x 17 17 A4 15 x 19 16 x 15	2 P/T 2 P/T P/T 2 P/T 2	Left Right Left/Right Right/Right Right/Right Left/Right Right/Right Left/Right Left/Right

# Section VIII

## **Suggestions For Safety**

- 1. Gasoline vapors are explosive and being heavier than air will settle in the lower parts of a boat. While fueling, all doors, hatches, and ports should be closed; galley fires and pilot lights extinguished, smoking strictly prohibited; and the filling nozzle kept in contact with the fill pipe to prevent static spark. Avoid spilling. Do not use gasoline stoves, heaters or light on board. Whenever possible, portable tanks should be fueled out of the boat.
- 2. After fueling, thoroughly ventilate all compartments and check the machinery and fuel tank areas for fumes before attempting to start the motor. Remember that the electrical ignition and starting system could supply the ignition to any accumulation of explosive vapors. Take time to be safe. Keep fuel lines tight and bilges always clean.
- 3. Do not overload or improperly load your boat. Maintain adequate free-board at all times; consider the sea conditions, the duration of the trip, the predicted weather, and the experience of the operator. Do not permit persons to ride on parts of the boat not designed for such use. Bow riding and seat back or gunwale riding can be especially hazardous.
- 4. Keep an alert lookout. Serious accidents have resulted from failure in this respect.
- 5. Be especially careful when operating in any area where swimmers might be. They are often difficult to see.
- 6. Watch your wake. It might capsize a small craft; it can damage boats or property along the shore. You are responsible. Pass through anchorages only at minimum speed.
- 7. Keep firefighting and lifesaving equipment in good condition and readily available at all times.
- 8. Obey the Rules of the Road. Neglect of this is the greatest single cause of collision.
- 9. Always have children wear lifesaving devices. Always check those intended for young children for fit and performance in the water on each individual child. Never hesitate to have "all hands" wear lifesaving devices whenever circumstances cause the slightest doubt about safety.

PERSONAL FLOTATION DEVICES: REQUIREMENTS — One Coast Guard approved personal flotation device (PFD) of suitable size 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".

MANDATORY EQUIPMENT — 1. Boats sixteen (16) feet or over in length: one Type I, II or III (wearable) for each person on board and one Type IV (throwable) in each boat. 2. Boats less than sixteen feet in length and all canoes and kayaks: one Type I, II, III or IV PFD for each person on board.

Type I — A Type I PFD is an approved device designed to turn an unconscious person in the water from a face downward position to a vertical or slightly backward position, and to have more than 20 pounds of buoyancy. Recommended for offshore cruising. Acceptable for all size boats.

Type II — A Type II PFD is an approved device designed to turn an unconscious person in the water from a face downward position to a vertical or slightly backward position and to have at least 15.5 pounds of buoyancy. Recommended for closer, inshore cruising. Acceptable for all size boats.

Type III — A Type III PFD is an approved device designed to keep a conscious person in a vertical or slightly backward position and to have at least 15.5 pounds of buoyancy. While having the same buoyancy as Type II, the Type III has a lesser turning ability to allow for a comfortable design for water activities such as water skiing. Recommended for inwater sports, or on lakes, impoundments, and close inshore operation. Acceptable for all size boats.

Type IV — A Type IV PFD is an approved device designed to be thrown to a person in the water and not worn. It is designed to have at least 16.5 pounds of buoyancy. Acceptable for boats less than 16 feet and canoes and kayaks and as a throwable device for boats 16 feet and over in length.

- 10. Know your fuel tank capacity and cruising range. If it is necessary to carry additional gasoline do so only in proper containers and take special precautions to prevent the accumulation of such vapor in confined spaces.
- 11. If you 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.

CAUTION: Bayliner trailerable boats contain flotation material; however, no boat is unsinkable. Therefore, personal flotation devices should be carried for each passenger in accordance with U.S. Coast Guard requirements.

- 12. Good housekeeping is even more important afloat than ashore. Cleanliness diminishes the probability of fire.
- 13. Know the meaning of the buoys. Never moor to one it is a Federal offense.
- 14. Consider what action you would take under various emergency conditions man overboard, fog, fire, a stove-in plank or other bad leak, motor breakdown, bad storm, collision.

- 15. Have an adequate anchor and sufficient line to assure good holding in a blow (at least six times depth of water).
- 16. Boat hooks are not required equipment but they are valuable when mooring or when needed to retrieve pets, preservers (and people) "over the side".
- 17. Know the various distress signals. A recognized distress signal used on small boats is to slowly and repeatedly raise and lower the arms outstretched to each side.
- 18. Storm signals are for your information and safety. Learn them and be guided accordingly.
- 19. Water ski only when you are well clear of all other boats, bathers and obstructions and there are two persons in the boat to maintain a proper lookout.
- 20. Falls are the greatest cause of injury both afloat and ashore. Eliminate tripping hazards where possible, make conspicuous those which must remain, have adequate grabrails, and require proper footwear to be used on board.
  - 21. Always have an up-to-date chart (or charts) of your area on board.
- 22. Always instruct at least one person on board in the rudiments of boat handling in case you are disabled or fall overboard.
- 23. Keep electrical equipment and wiring in good condition. No knife switches or other arching devices should be in fuel compartments. Allow ample ventilation around batteries.
- 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 so as to prevent any false alarms about your safety.
- 25. 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.
- 26. A special flag hoist (red flag with white diagonal) flown from boat or buoy means skindiving operations. Approach area with caution and stay clear at least 25 yards.
- 27. Your local U.S. Coast Guard 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 Guard Auxiliary or Power Squadron Flotilla for the time and place of the next class.

# Section IX

### **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 sides 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. 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.

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

overboard.

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

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

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

**STRAKE:** One line of planks from bow to stern.

TRANSOM: The vertical part of the stern.

**WAKE:** The track or path a boat leaves behind while in motion.

WINDWARD: The direction from which the wind is blowing.

#### LIMITED WARRANTY FOR BAYLINER BOATS

Bayliner Marine Corporation warrants each new boat to be free from defects in material and workmanship under normal use and service for a period of one year (12 months) from date of delivery to the original purchaser. The obligation of Bayliner under this warranty is limited to replacement or repair of a defective part free of charge by an authorized Bayliner dealer or at a Bayliner factory; this is Bayliner's option. Return transportation of any boat to a Bayliner factory, return transportation of any boat to a Bayliner dealer, dealer's travel expense, haulouts and miscellaneous handling expense is to be paid by the claimant. All repairs are subject to the authorization of the Bayliner factory.

This warranty does not apply to (1) engines, outdrives, control, props, batteries or other equipment or accessories carrying their own individual warranties (appropriate adjustments to them being provided by their respective manufacturers); (2) installation of engines or accessories installed by others; (3) windshield breakage or leakage; gel coat finish, blisters, cracks or crazing; (4) all canvas, vinyl, upholstery, plastics, fabric, and trim; (5) any Bayliner boat which has been altered, subject to misuse, negligence or accident, or used for racing purposes; (6) any Bayliner boat which has been overpowered according to our maximum recommended engine horse-power specifications on the capacity plate provided for each Bayliner boat model; (7) any Bayliner used for commercial purposes.

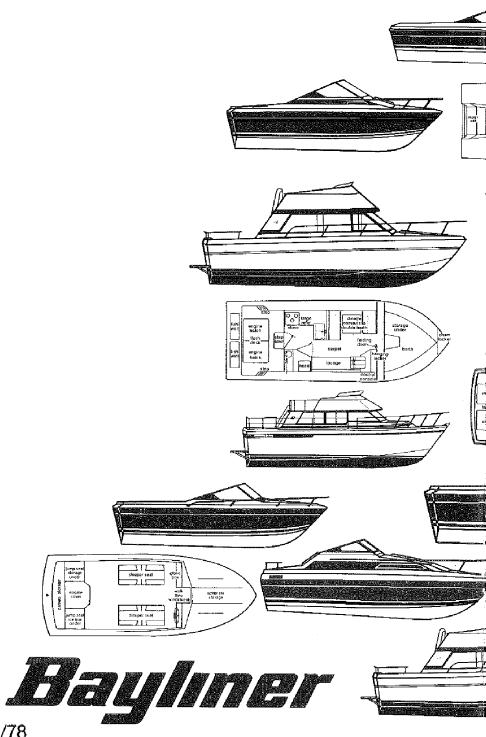
The implied warranties of merchantability or fitness for a particular purpose, if any, shall not extend beyond the period of one year (12 months) from date of delivery of the new boat to the original purchaser from an authorized Bayliner dealer. Bayliner Marine Corporation shall not be liable for special or consequential damages to person or property. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Consumer's claim under this warranty must be made to the dealer from whom the boat was purchased. In the event the consumer is not satisfied with dealer's performance, he should contact Bayliner Marine Corporation. If all else fails, the consumer has the privilege of action at law to claim damages for breach of warranty.

Bayliner Marine Corporation and its dealers will perform the obligations under this warranty promptly upon notice of claim and decision that the warranty claim is valid. Obligations of the warranty will be completed within sixty (60) days after notice of a defect within the warranty.

This is a limited warranty.

1979 Model Year.



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