

# **OWNER'S MANUAL**

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## **General Information**

#### **Limited Warranty**

The manufacturer warrants to the original, non-commercial retail purchaser each new boat and factory installed option to be free from defects in material and workmanship, but only when sold in a country authorized by the manufacturer and by a dealer authorized by the manufacturer.

This warranty shall become effective only upon manufacturer's receipt of completed Warranty Registration Form which identifies the boat by Hull Identification Number. This warranty shall remain in effect for the following time periods:

#### Warranted for Five Years from Date of Retail Purchase

- Hull
- Stringers
- All structural components

#### Warranted for Two Years From Date of Retail Purchase

MotorGuide Trolling Motor (Covered by Motorguide)

#### Warranted for One Year From Date of Retail Purchase

- Instrumentation
- Hardware
- Boat Wiring Harness & Switches
- Steering Components
- Fuel Tanks
- Bilge Pumps, Aerators, Hose and Hardware
- Lights
- Electronics (Covered by Electronics Manufacturer)
- Engine (Covered by Mercury/Mariner/Force)

The manufacturer's obligation under this warranty is limited to repairing a defective part, or at the manufacturer's option, replacing the part or parts as is necessary to correct any malfunction resulting from defects in material or workmanship. The manufacturer reserves the right to improve the design on any rig without assuming any obligation to modify any past boat.

You may make a claim under this warranty by delivering the boat for inspection to an authorized dealer. You must pay for all related transportation charges and/or travel time. If the service is not covered by this warranty, you must pay for all related labor and material and any other expenses associated with that ser-

vice. Any boat or parts shipped by you for inspection or repair must be shipped with transportation charges prepaid.

This warranty applies to defects in material and workmanship. It does not apply to:

- normal maintenance, wear, or deterioration
- damage due to alteration, misuse, negligence, lack of maintenance, improper trailering, accident, or overpowering
- engines, batteries, and depth finders, (see their respective warranties)
- damage due to installation of equipment by someone other than the manufacturer
- windshield breakage
- tears or cuts in upholstery or canvas
- gelcoat cracking, crazing, blistering, or fading
- participating in, or preparing for, racing or other competitive activity
- rigs used in commercial or revenue generating applications

Reasonable access to the boat must be provided for warranty service. This warranty does not apply to: haul-out, launch, towing and storage charges, telephone or rental charges of any type, inconvenience, loss of time or income or other consequential damages.

ALL INCIDENTAL AND/OR CONSEQUENTIAL DAMAGES ARE EXCLUDED FROM THIS WARRANTY. WARRANTIES OF MERCHANTABILITY AND FITNESS ARE EXCLUDED FROM THIS WARRANTY. IF AN IMPLIED WARRANTY IS DETERMINED TO EXIST, IT WILL APPLY FOR 6 MONTHS FROM THE DATE OF THE ORIGINAL RETAIL PURCHASE. SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights. You also may have other legal rights which vary from state to state.

# Warranty Registration Procedures

The Warranty Registration Card included in the Owner's Packet must be completed in its entirety and returned to the manufacturer within 30 days of the original date of retail purchase. The Registration Form will normally be completed, and forwarded to the manufacturer, by the selling dealer. However, if the dealer does not complete the form and forward it to the manufacturer on your behalf, it is your responsibility to do so within the 30 day period in order to properly register your warranty. Be sure the appropriate warranty registrations for your engine, and accessories are properly completed and submitted according to the respective manufacturer's instructions.

# **Warranty Claim Procedures**

We make every effort to provide products that require a minimum of warranty service. In the case of engines, trolling motors, factory installed depth finders, it is necessary to follow the respective manufacturer's warranty procedure as outlined in their respective owner's manuals. In cases of warranty service requests on the boat, please adhere to the following guidelines:

- 1. Contact the nearest authorized dealer, or the selling dealer, to arrange when you can deliver the boat to his dealership for inspection.
- 2. When delivering the boat to the dealer, please have in writing the nature of the problem to avoid any misunderstanding.
- 3. In most cases, the dealer will be able to perform the necessary warranty service and have you back on the water without delay. However, there are circumstances in which the dealer will have to obtain prior approval from the manufacturer before completing warranty service. Depending upon the nature of the required warranty service, receiving such prior approval may be as simple as making a phone call to the manufacturer or as complex as submitting photos to the manufacturer. In extreme cases, it may be necessary to return the boat to the manufacturer for inspection and repair. You should understand that in the event the boat must be returned to the manufacturer, you may be responsible for all transportation and related charges.

## **Hull Identification Number**

The hull identification number affixed to the upper starboard corner of the transom is the most important identifying factor and must be included in all correspondence and orders. Failure to include it only creates delays. Also of equal importance are the engine serial numbers and part numbers when writing about or ordering parts for your engine.

## Safety

Your safety, as well as the safety of your passengers and vessel, are your responsibility. Familiarize yourself with the following safety precautions prior to using your boat.

## **How CO May Accumulate**

## DANGER

All gasoline powered boats, engine and generator exhaust systems produce colorless and ordorless carbon. monoxide gas (CO).Direct prolonged exposure can result in CO poisoning which may be harmful or fatal. To prevent excess exposure and reduce the the possibility of accumulation of CO in the cabin and cockpit of the boat, the operator should ensure adequate ventilation in each the cabin and cockpit areas through utilization of cabin hatches, cabin doors, cabin windows, cockpit windshield windows and side windshield vents to increase air movement through the cabin and cockpit areas. The following conditions tend to increase accumulation of CO in and about the boat and require the operator's particular attention: (1) Operation at slow speeds or dead in the water. (2) Operation with a high bow angle attitude. (3) Contributing climatic conditions such as head winds. (4) Operation of engines and/or generators in confined spaces or dockside. (5) Any blockage of hull exhaust outlets. Indications of excessive exposure to CO concentrations may include nausea, dizziness, and drowsiness.

**WARNING**: WHEN YOU ARE TIED TO A DOCK AND/OR IMME-DIATELY ALONG-

SIDE OTHER VESSELS, PAY PARTICULAR ATTENTION TO THE GENERATOR EXHAUST EMISSION FROM THE NEARBY ~= VESSELS.



WARNING: WHEN OPERATING BOAT AT CRUISING SPEEDS... SLOW SPEEDS, OR DEAD IN THE WATER WITH CANVAS



TOPS, SIDE CURTAINS, AND/OR AFT CURTAINS IN PLACE, PAY PARTICULAR ATTENTION TO ENGINE EXHAUST TO IN-SURE THAT EMISSIONS DO NOT ACCUMULATE IN BOAT IN-TERIOR, MAINTAIN PROPER VENTILATION BY ADJUSTING CANVAS ENCLOSURES.

WARNING: WHEN OPERATING A VESSEL WITH EXCESSIVE BOW ANGLE PAY ATTENTION TO THE ENGINE **EXHAUST** EMISSIONS AS TO INSURE THAT EMISSIONS DON'T AC-CUMULATE IN BOAT INTERIOR.



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## Other safety precautions

- All passengers should remain properly seated while the boat is in motion.
- Keep your boat and equipment in top condition by frequently inspecting the hull, engines, and gear.
- Use the utmost caution when taking on fuel. Know your fuel tank capacity and fuel consumption at various RPM's.
- Be certain there is enough fuel aboard for your anticipated cruising needs and an adequate reserve should you change your plans for weather or other reasons.
- Be sure that regulation lifesaving and fire fighting equipment is on board and in proper working order. They should be noticeable, easily accessible, and your passengers should be instructed in their use.
- Watch the weather. Check local weather forecasts before departure.
- Have up-to-date charts of your cruising area on board.
- File a float plan with a friend or relative.
- Instruct your passengers in the basic fundamentals of handling your boat in the event you are unable to do so.
- Do not overload or improperly load your boat.
- Do not permit passengers to ride on parts of the boat not designed for such use. Instruct passengers to sit in designated seating areas while underway.

- Proper foot gear should be worn at all times to avoid slipping and falling.
- Know and obey the Rules of the Road and always maintain complete control of the boat.
- Always operate with care, courtesy, and common sense.

## Lightning Protection

The basic purpose of lightning protection awareness is to ensure the safety of the boat owner and passengers during a lightning storm. Everyone on board should take the following precautions.

- 1. Ideally, docking your vessel and disembarking for a safe haven is recommended. However, if this is not possible, seek shelter inside the boat and stay there until the storm has passed.
- 2. No one should be in the water during a lightning storm! If caught swimming during a storm, get back in the boat and remain there until the storm has passed.
- 3. Avoid contact with metal parts of the boat because lightning will seek a ground.

#### Loading

The capacity plate attached to the boat states the maximum persons in pounds and the maximum weight capacity for persons, motor, and gear in pounds that the boat will handle safely under normal conditions. These load capacity ratings are computed from a rather complex formula determined by the U.S. Coast Guard. Overloading is a violation of Coast Guard Regulations.

Step in your boat. DO NOT JUMP IN. Use step pads where provided or step near the boat's centerline.

Wear rubber sole shoes to prevent slipping and to avoid scuffing your boat's finish.

Have someone on the ground hand you gear after you are aboard the boat. Secure all gear firmly so that it will not shift or interfere with the operation of the boat. Place heavy gear in the boat so that the load is balanced and will not affect the trim of the boat.

Have passengers come aboard one at a time. Place passengers so boat is evenly balanced front to rear and side to side. Uneven weight distribution will affect boat performance.

#### **Grounding and Towing**

If you unfortunately find yourself aground and unable to pull off with your own power, or if you wish to help another craft from the predicament, remember that there is no way of knowing the amount of pull or strain which will be required. The stress may easily exceed the strength of the cleats and their fastenings. Cleats are designed and located for mooring purposes only. The boat structure itself can be damaged by excessive pulling strain. It is much safer, in these cases, to form a bridle passing a line completely around the hull. This should be done for both the pulling boat and the boat being aided.

Some synthetic fiber ropes should not be used for pulling or towing. The characteristic ability of some types of rope to stretch may make it desirable for anchor and dock lines, but make it extremely dangerous if the line breaks loose under stress. The preferred line for towing is double- braided nylon. It has sufficient elasticity to cushion shock loads, but not so much as to create a "snap back" hazard. Any type of line breaking under stress is dangerous and over stressing should be avoided. ALWAYS STAND CLEAR OF ANY TAUT LINES.

#### Government Regulations

The Coast Guard is an ever-present help to the boating public. Its boating regulations prescribe minimum standards of safety, and you must equip your WAHOO! to comply with these regulations. The following is a list of the safety equipment required for a boat 16' to less than 26'. These requirements may vary from state to state, and it is best to consult your WAHOO! dealer for variations of these requirements in your area.

- At least one B-1 type hand-held portable fire extinguisher.
- At least one Coast Guard approved Type 1, 2, or 3 personal flotation device (life jacket) for each person aboard or being towed on water skis, etc.
- At least one Type 4 device designed to be grasped instead of worn (ring buoy or buoyant cushion.)
- At least three approved hand-held red pyrotechnic distress signals; three approved aerial red pyrotechnic distress signals for night use; and three approved international orange smoke signals for daytime use. All pyrotechnic devices must be stowed in waterproof, non-glass containers.
- One power-operated whistle or horn, audible for at least half a mile.

 It is recommended that you also carry an anchor, anchor line, mooring lines, fenders, first aid kit, waterproof flashlight, spare fuses, electrical tape, and tools to make minor repairs.

#### Discharge of Oil

The Federal Water Pollution Control Act prohibits the discharge of oil or olly waste into or upon the navigable waters and contiguous zones 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.

# Disposal of Plastics and Other Garbage in Waters of the United States

Federal regulations prohibit the discharge of plastic garbage anywhere in the marine environment. Plastic includes but is not limited to: plastic bags, styrofoam, cups and lids, six- pack holders, bottles, caps, buckets, shoes, milk jugs, egg cartons, stirrers, straws, synthetic fishing nets, ropes, lines and "bio or photo-degradable" plastics.

Boat owners and operators are required to display trash overboard discharge labels on all boats **over 26'** to inform passengers and crew about the law and penalties regarding marine pollution in United States waters.

These regulations also restrict the disposal of other types of garbage within the specified distances from shore, and conform to "Annex V" of the International Convention for the Prevention of Pollution From Ships, 1973, commonly known as Annex V of MARPOL (Marine Pollution) 73/78.

The U.S Coast Guard is responsible for enforcement of Annex V.

A person found to have violated these regulations may be liable for a civil penalty not to exceed \$25,000 for each violation. In addition, criminal penalties not to exceed \$50,000 and/or imprisonment up to five years may be imposed.

Lack of compliance with the requirement may be cause for owner/operator citation and fine by the U.S. Coast Guard during routine boarding.

The Coast Guard may deny vessels not in compliance entry to marinas and terminals.

#### Rules of the Road

Your boat is subject to Coast Guard enforced marine traffic laws known as "Rules of the Road." There are two sets of rules: the United States Inland Navigational Rules and the International Rules. The United States Inland Rules are applicable to all vessels inside the demarcation lines separating inland and international waters. The "Rules of the Road" can be obtained from your local Coast Guard unit or from the United States Coast Guard Headquarters (1300 E. Street NW, Washington, D.C. 20266) in the publication "Navigational Rules, International-Inland."

While there are specific U.S. Coast Guard rules concerning inland operation of watercraft, in general, you should observe the following:

- 1. Keep clear of fishermen, water skiers, scuba divers, swimming areas, sailboats, rowboats, commercial and official government craft.
- 2. Control your speed. Obey speed limits. Slow down when approaching other craft and swimming areas.
- 3. Watch your wake. You are legally responsible for damages caused by your wake, including damage along the shoreline.
- 4. Yield the right-of-way to boats being overtaken, to rowboats, sailboats, steamers and large vessels.
- 5. Be ready to render assistance to other craft in distress.

"Aids to Navigation (Coast Guard pamphlet no. 123) explains the significance of various lights and buoys. This and other pamphlets including the "Boating Safety Training Manual," and "Federal Requirements for Recreational Boats" are also available from the United States Coast Guard Headquarters.

Because of proposed alterations in buoys and markers, we advise you to periodically contact the Coast Guard to stay apprised of impending changes.

If you have a ship-to-shore radio telephone aboard, heed storm warnings and answer any distress calls. The spoken word "MAYDAY" is the international signal of distress. NEVER use this word unless there is danger close at hand, an emergency, and you are in need of immediate assistance.

## **Boating Safety Education**

Prior to departing on your first outing in your new boat, it is wise to know what to expect on the water, how to react to various circumstances, and what to do in cases of emergency. This information is available in many boating safety courses which all boat operators should complete. Courses are offered by the (1) U.S. Coast Guard Auxiliary, (2) the U.S. Power Squadron, (3) The Red Cross, and (4) your state boating law enforcement agency. To obtain information about boating safety courses in your area, you may contact the Boating Safety Hotline at 1-800-368-5647 or the Boat U.S. Foundation at 1-800-336-BOAT.

#### Flotation

Your boat meets or exceeds U.S. Coast Guard requirements for flotation. Outboard boats less than 20 feet in length built after August 1, 1978 are certified to meet LEVEL FLOTATION standards. During swamped conditions, boats with level flotation remain upright and level in calm waters. THIS DOES NOT MEAN THAT A BOAT WILL RIGHT ITSELF IF IT IS TURNED UPSIDE DOWN.

In the event of swamping your boat in open water, or if it is turned upside down in open water, all boat occupants should remain with the boat until help arrives.

## Trailering Tips

Be sure your tow vehicle's manufacturer has rated your tow vehicle for a towing capacity adequate to tow your new rig.

Be sure you have the appropriate hitch installed on your vehicle before attempting to tow your boat and trailer. In most cases, a Class II trailer hitch is appropriate for your boat and trailer. You may want to consider a Class III "receiver" style hitch which has a heavier towing capacity than a Class II hitch, particularly if you have purchased a 19 feet or larger rig. In all cases, you should use a hitch that mounts to your vehicle's frame. If you are not sure which hitch is best suited for your combination of tow vehicle and boat rig, you should consult a dealership that sells and installs hitches.

Before each trip, check the following:

All trailer lights are in proper working order.

- The trailer tires are properly inflated according to the tire manufacturer's inflation rating on the tire.
- The axle bearings are properly greased.
- The wheel lug nuts are properly tightened. These should be checked every 50 miles during the first 250 miles of towing and every 250 miles thereafter.
- The coupler is firmly attached to the hitch ball.
- It is recommended to put a lock through the coupler lever for added safety in preventing the lever from opening and the coupler from loosening from the hitch ball.
- Trailer safety chains are properly attached from the trailer to the tow vehicle using a "crisscross pattern."

Never exceed the posted speed limit when trailering a boat.

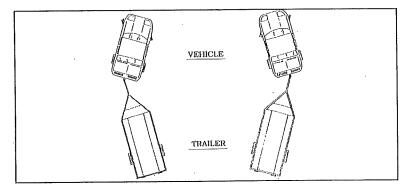
Never make "jackrabbit" starts as this will put undue strain on your tow vehicle's drive train and transmission.

Always allow a greater stopping distance when trailering a boat rig. The added weight of a boat, motor, and trailer requires more stopping distance than a non-towing vehicle normally requires.

When turning a corner, generally make a wider turn than normal as the boat trailer will have a tendency to "cut short" any corner.

When traveling over rough roads or rough areas such as railroad tracks, slow down in order to reduce motor bouncing and possible resulting damage to the transom of your boat.

When backing up, understand that the trailer will turn the in the **opposite** direction of how you turn the steering wheel. Do not jack knife the trailer as possible damage to the coupler, hitch, trailer, or tow vehicle may result.



Classic Series

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# Launching Checklist

# **Before Leaving**

<ol> <li>Personal Flotation Device-</li> <li>Throw Ring/Buoyant Cushion</li> <li>Weather Conditions</li> <li>Required Documents</li> <li>Navigation Equipment</li> <li>Coast Guard Equipment</li> </ol>	One For Each Person At Least One Safe To Go Out All On Board All On Board Required Equipment on Board
Trailering (when applicable)	
<ul> <li>7. Trailer Hitch</li> <li>8. Engine Clearance</li> <li>9. Electrical</li> <li>10. Safety Chains</li> <li>11. Mirrors</li> <li>12. Boat Position</li> <li>13. Tie-Downs</li> <li>14. Winch</li> </ul>	Check Connection & Fit In Trailer Position Check Lights, Brake Lights, & Turn Signals Attached Adjusted For Trailering Secure on Trailer Tight Locked
Prior to Launching Boat	
<ol> <li>Transom Drain Plug</li> <li>Bilge Pump</li> <li>Navigation Lights</li> <li>Power Trim</li> <li>Oll Injection System</li> <li>Steering Fluid</li> <li>Steering System</li> </ol>	InstalledWorking & CleanWorkingWorkingFilled with Recommended OilFullWorking Smoothly & Properly
Pre-Inspection After Launch	
<ol> <li>Fuel</li> <li>Fuel System</li> <li>Throttle Control</li> <li>Alarms</li> </ol> Starting Cold Engine	Filled with Recommended Fuel Check for Leaks, Fumes Place in Neutral Turn Key & Check Oil Level & Engine Alarms (Should Sound
Starting Cold Engine	
<ol> <li>Water Intake</li> <li>Primer Bulb</li> <li>Ignition Breaker Switch</li> <li>Throttle Only Button</li> <li>Throttle Control</li> <li>Ignition Key</li> </ol>	Below Water Surface Squeeze Until Firm ON Hold In & Advance Until Throttle Is Out of Neutral Position Pump Throttle Slightly As Required While Operating Starter Push IN to CHOKE, then Clockwise to
	Start

Important: Do not continue to operate starter for more than 10 seconds without pausing to allow starter motor to cool off for two minutes. This also will allow battery to recover between starting attempts.		
Starting Warm Engine		
<ol> <li>Water Intake</li> <li>Throttle Control</li> <li>Ignition Breaker</li> <li>Ignition Key</li> <li>Engine Start</li> <li>Engines Falter</li> </ol>	Below Water Surface Below Water Surface On Turn Clockwise to Start Return Key to RUN Position Follow "Starting Cold Engine" Instructions	
After Starting Engine		
<ol> <li>Check Tell Tail</li> <li>Fuel Gauge</li> <li>Fuel Lines</li> <li>Engine Operation</li> <li>Water Test Boat</li> </ol>	Water Being DischargedCheck for Adequate LevelCheck for Leaks, FumesCheck Idle and ShiftNote RPM & General Operation	
Stopping the Engine	·	
1. Throttle Control 2. Ignition Key	Shift to NEUTRAL Turn to OFF Position	

Return Key to RUN Position

7. Engine Start

## **Operating Your Boat**

## Drain Plug

The WAHOO! is fitted with a brass garboard drain plug. This threaded plug is installed through the outside of the transom. We recommend removing the drain plug when trailering or storing your boat. BE SURE YOU REPLACE THE DRAIN PLUG PRIOR TO LAUNCHING.

## Bilge Pumps

Your WAHOO! is equipped with bilge pump and float switch located in the bilge area. The pump is accessible through the inspection plate or sump access board near the motor splash well area.

The pump works automatically and is protected by a 15 amp fuse on the switch panel. The pump is also equipped with a manual override switch on the helm switch panel. When the switch is in the up, MANUAL, position, the pump will run continuously. When it is in the down, AUTO, position the pump is activated when the water level in the bilge raises the float switch to its highest position; and deactivated when the water level recedes allowing the switch to fall to its lowest position. The pump should be left in AUTO mode unless the bilge is being pumped out for servicing.

Because of the weight of water, 8.3 pounds per gallon, it is important to keep the bilge as free from water as possible. Frequently inspect the area under the float switch to assure it is free from debris and gummy bilge oil. To clean, soak in heavy duty bilge cleaner for 10 minutes, agitating several times. Check for unrestricted operations of the float switch. Repeat the procedure if necessary. Inspect the bilge pump intakes and keep them free of dirt or material which may impede the flow of water through the pump. To clean the pump strainer, depress the lock tabs on both sides of the pump and lift the pump cover.

# The Marine Engine

This manual does not dwell on the engine in detail Necessary information concerning your engine is in the Engine Operator's Manual. It will be found in the Owner's Packet and you are urged to familiarize yourself with it. The life and performance you

receive from your engine depends greatly upon the way it is cared for. Adherence to a good maintenance schedule will result in many hours of pleasurable boating. It is strongly suggested that you have all maintenance and repair of your engine performed by a factory authorized and certified mechanic.

#### **Boat Performance**

Most people say they are concerned about boat performance. However, as a manufacturer, our concept of boat performance may differ from your concept. Each person must ask themselves what the important ingredients are in determining performance levels. To some people, performance simply means how fast the boat will go. To others, it is how smooth a ride the boat delivers. To us performance includes:

- 1. Planing ability of the hull
- 2. Ability of the hull to remain on plane at slow speeds
- 3. Handling characteristics in turns
- 4. Ability to handle rough water and deliver a dry ride
- 5. Top end speed
- 6. Handling stability at high speeds
- 7. Smooth, comfortable ride at all speeds
- 8. Interior layouts conducive to fishing, skiing, and pleasure boating.

We believe we have incorporated these features into our boats.

After your initial cruise and learning about your boat's systems, you will be ready to use your new boat on a regular basis. The more time you spend in your boat, the more familiar you will become with its performance capabilities. Aside from the hull design you chose when making your purchase, and the engine you chose, there are several items that will affect the ride your boat will deliver.

## 1. Passenger and Gear Loading

Passengers and gear should be evenly distributed fore and aft in the boat as well as from port to starboard. As passengers sit in different locations, you will notice a change in planing ability and top end speed. This shift in passenger weight alters the planing angle of the hull or thrust of the propeller in much the same manner as though the drive unit angle was changed. Placing too much weight forward may cause the bow of the boat

to "plow". Placing too much weight aft may cause the boat to "porpoise".

#### 2. Engine Trim Adjustment

Most outboard engines installed on our boats are equipped with an electric trim control located on the engine throttle handle. The trim feature allow you to change the angle of the engine. The same boat under different load conditions may require varied motor trim angles to achieve the same performance. The motor trim angle is the relation of the propeller thrust to the planing surface of the hull's bottom. For a list of characteristics resulting from trimming your engine "under", "down, "in", "up" or"out", see your engine owner's manual.

## **DANGER**

Avoid possible serious injury or death. Adjust engine to an intermediate trim position as soon as the boat is on plane to avoid possible ejection due to boat spin out. Do not attempt to turn boat when engine is trimmed extremely under or in.

#### Adjusting the Trim Angle

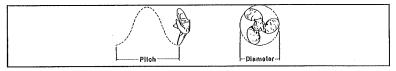
The trim angle of the motor is adjusted at the throttle control (see engine owner's manual for complete instructions on operation of this feature). In most cases, when the boat is sitting still in the water or simply idling, you will want the motor trimmed to a position perpendicular to the water. Exceptions might be when you are in extremely shallow water or there are underwater obstacles such as tree stumps. Also, before putting the boat on plane, you will want the engine "tucked in" to its fullest trim down position. Your boat is designed to give you guick acceleration. with a minimum of time spent in the bow-up transitional planing off condition. However, once on plane, the engine should be trimmed out a little to avoid a bow condition called "plowing". Plowing can cause "bow steering" or "oversteering" and inefficiently consumes horsepower. In this condition, if attempting a turn or encountering a diagonal moderate wake, a more abrupt turn than intended may result.

If your motor is not equipped with the electric trim feature, you will need to manually adjust the trim angle prior to putting the boat in the water. See your engine owner's manual for instructions.

Under certain engine trim positions and/or bow-up boat attitude, such as when getting on plane there can be a noticeable pull on the steering wheel, often referred to as "steering torque". This may only be a temporary situation such as when planing off. If steering torque persists, it may be eliminated or reduced by changing your engine trim angle. Under some conditions, adjustment of the engine trim tab will also help reduce steering torque. See your engine manual for a more detailed explanation of steering torque.

#### Propeller

The propeller ("prop") you chose for your boat can greatly affect the performance. We have done extensive testing to provide you with the prop we have found to be most suitable for your boat and motor combination under normal use situations. However, your individual usage characteristics may indicate a different prop is more appropriate.



Propellers have three basic characteristics. The first and most obvious is the material of which they are made. The props we match up to WAHOO's are either made of aluminum or stainless steel. Aluminum props are less expensive than stainless steel; and therefore, less expensive to replace when damaged. On the other hand, stainless steel props are generally less prone to damage than aluminum props.

The second basic characteristic is diameter. Diameter is the distance measured across the propeller hub line from the outer edge of the 360 degree arc made by the prop's blade during a single rotation.

The final basic characteristic is pitch. Pitch is the angle of the blades from a flat plane, expressed in inches in terms of the propeller's theoretical advance through the water in complete rotation. For example, a prop with a 21" pitch when rotated 360 degrees would, theoretically, advance 21 inches through the water. In reality no prop applied to any boat is 100 percent efficient. No 21" prop will, in a single rotation, advance a boat 21 inches. This variance is referred to as slippage.

With an accurate tachometer to report the revolutions per minute (RPM) of your engine at the crankshaft, a knowledge of the gear ratio of your power plant, and the pitch of the propeller, you can tell the distance, in inches, your boat should advance in one minute based on 100 percent prop efficiency.

In is not necessary for your to understand, or even know, exact formulas for calculating prop efficiency. However, your interest should be in gaining the greatest possible forward motion from your boat at any throttle setting. The reason for this is to obtain the greatest economy in operating your boat as is possible. In order to do this, you will have to do some testing.

No one prop is best for your boat and engine under all conditions, use, and loads. A prop change will be needed to gain the best possible performance for each type of activity and load. For instance, a higher pitch prop might be called for if there will be only two people in your boat and the activity will be fishing. However, if you plan to have four people aboard, a cooler of food, and pulling two skiers a lower pitch prop will be necessary. You may feel as though changing props is a nuisance and decide to do all your boating with one prop. However, depending upon your prop, load, and activity, you may sacrifice planing ability or top end speed. This is your prerogative. Not only is an extra prop a wise investment for your different boating needs but also a wise investment to have a spare aboard in the event your primary prop becomes badly damaged. DO NOT OPERATE YOUR ENGINE WITH A DAMAGED PROP. SEVERE MOTOR DAMAGE MAY OCCUR.

Your engine owner's manual will indicate within what RPM range your motor should be operated. In determining the top end performance of your boat, it is necessary to compare the speedometer reading with the tachometer reading. Any time you notice a reduction in speed occurring while the engine RPM's are increasing, it is most likely you have over-trimmed the engine. You should trim the motor down slightly.

A tachometer is also a gauge of your engine's condition. After a period of use, if you notice your engine has fallen off several hundred RPM's, check into the cause. Your engine may need to be tuned, you may need to replace spark plugs, or your prop may be damaged. Whatever the cause, have it corrected to obtain the best performance possible and to avoid possible costly repairs later.

## Instruments and Controls

#### Steering System

Steering your boat is a lot like steering your car on a slippery or icy road, The stern responds first by swinging out in the opposite direction to the turn of the bow. (If you turn the steering wheel for a left turn, the stern will move to the right.) The swing of the stern can be critical when leaving a dock or avoiding an object in the water.

Always slow down and allow plenty of room to turn. Avoid sharp turns at high speeds and be sure passengers are seated when making turns.

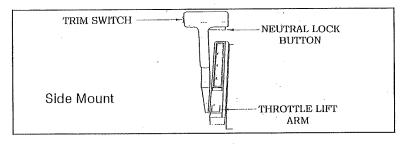
As previously discussed, be aware of the potential for steering torque. It is also important to be aware that operating a boat for extended periods of time with steering torque can result in driver fatigue. Reducing or eliminating steering torque will generally reduce the chance for driver fatigue.

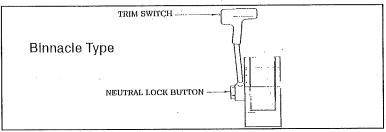
Remember the slogan: WATCH THE STERN WHEN YOU TURN.

The WAHOO! uses an optional hydraulic steering system in the 1850's and larger models. Periodically remove the plug in the helm unit and check the oil level visually. The oil level should be within 1/2" of the filler hole.

Periodically check the mechanical connections and linkages at the cylinder. Replace worn parts, tighten loose parts, and lubricate as needed. The steering system is protected against overpressure situations by a pressure relief valve. Sometimes when returning the wheel from a hard-over position, a slight resistance may be felt and a clicking noise may be heard. This is a completely normal situation caused by the releasing of the lockspool in the system.

Other models are equipped with standard steering. Periodically check all mechanical connections. Replace worn parts, tighten loose parts, and lubricate as needed.





#### **Shift and Throttle Controls**

Control functions for factory installed shifters follow. For shifters not installed by WAHOO!, see your engine owner's manual.

- 1. Neutral Lock -- (For side mount controls) To move the control lever from neutral, depress the neutral lock button under the control handle grip. This allows you to move the handle forward and reverse. Binnacle or top mount controls installed by WAHOO! do not have neutral lock button.
- 2. Engine Warm Up -- Warm up can be done by moving the control lever forward or reverse after pulling out on the lever hub and depressing the neutral lock button under the control handle grip. By either using the throttle lift arm on side mount control or by depressing the neutral lock button and simultaneously advancing the throttle arm forward on binnacle control.
- 3. Forward -- With control in neutral, lift up on neutral lock button. Move lever forward to advance throttle and to regulate forward speed. On binnacle type control, simply push shift/throttle control forward
- 4. Reverse -- From forward, pull lever back to neutral. Pause. Lift neutral lock button and pull lever back to shift into reverse gear. Continue pulling lever back to advance throttle and to regulate reverse speed. Avoid running in reverse for prolonged periods or at high speed.

5. Trim -- See section on trim.

## Ignition Switch

The ignition switch on your boat has four positions: "OFF", "ON", "START", and "CHOKE". The "START" positions is spring loaded and the key should be held in this position until the engine starts. After the engine starts, release the key and it will return to the "ON" position. Always turn key to the "OFF" position when the engine is not running to prevent discharging the battery. The "CHOKE" is engaged by pushing the ignition key switch in while cranking engine. It is not necessary to actuate the choke when restarting a warm engine. DO NOT OPERATE THE ENGINE STARTER MOTOR FOR MORE THAN 10 SECONDS AT ONE TIME AS THE STARTER MOTOR WILL OVERHEAT.

#### Ignition Shut Down Switch

The WAHOO! utilizes an ignition shut down switch with lanyard to stop the engine when the operator of the boat leaves his control station in an unsafe situation, either accidentally by falling into the boat, or by falling or being ejected overboard. This would most likely occur as a result of poor operating practices, such as sitting on the back of the seat at planing speeds, standing at planing speeds, operating at high speeds in shallow or obstacle-infested waters, drinking while driving, or daring high-speed maneuvers.

Unintentional activation of the switch could cause potentially hazardous situations. Some of the situations could include: loss of balance and falling forward of unstable passengers; loss of power and directional control in heavy seas, strong current, or high winds; or loss of control when docking. The ultimate decision of whether to use an ignition shut down switch, rests with you, the owner/driver.

The ignition shut down switch incorporates a shut-off switch, switch clip, lanyard, and lanyard clip which is clipped to the helmsman. If a situation arises where the engine must be shut down, a pull on the cord to release the clip from the shut-off will shut down the engine.

This shut down switch is to be used as a safety stop switch only. It should not be used as the normal engine shut-off.

To reset ignition shut down switch after deactivation, simply reinstall the switch clip above the shut-off switch and flip the switch to the "UP" position.

#### **Tachometer**

The tachometer indicates revolutions per minute (RPM) of your engine. It does not indicated the speed of the boat through the water or over the bottom. Your engine owner's manual states the maximum full throttle RPM at which the engine should operate. This should not be exceeded.

#### Fuel Gauge

The fuel gauge indicates the amount of fuel in your tank. The most accurate reading of the fuel gauge is at idle speeds when your boat is in an approximately level position. At slow plane when your boat is in a bow up position, the gauge will read inaccurately because the fuel in the tank travels to the rear of the tank and will not register its true level.

Since boats are subject to considerably more stress than automobiles due to rough water conditions, the fuel gauge may not provide accurate readings at all times, even at idle speeds.

Become familiar with your engine's hourly fuel consumption at various speeds and use this, along with your running time as a backup check against the reading on the fuel gauge.

## Speedometer

The speedometer indicates the relative speed of your boat. It is made up of several parts located on the outboard engine. See engine owner's manual for proper gauge readings.

## Marine Compass

A marine compass is deflected and its usefulness impaired when other instruments or objects containing iron, magnets, or electric current carrying wires are in its vicinity. A newly installed compass must be adjusted to compensate for these influences if they must remain in proximity to it.

The compensating or adjusting should be done by a qualified compass adjuster. A compass can seldom be corrected to zero

deviation on all headings, so you will be provided with a deviation card or chart showing the correction to be applied when laying out a compass course or making your navigational calculations. Keep this deviation card or chart at the helm at all times.

After your compass is adjusted, do not permit items such as iron or steel to be placed near it, even temporarily, as they will affect its accuracy. The compass must be readjusted if any items which affect it are removed, relocated, or added in its vicinity.

When not in use, the compass should be protected from excessive and prolonged sunlight. If your compass becomes sluggish or erratic, it should be serviced by an authorized repair station.

Your compass is equipped for night used with a 12 volt - light that turns "ON" with the "NAVIGATION LIGHTS" breaker.

## **Fuel System**

Your WAHOO! has one fuel tank located under the cockpit sole or under the molded in helm seat depending upon model. The fuel fill plate is located in close proximity to the fuel tank on the gunnel. The fuel tank vent is located on the hull or deck below or beside the fuel fill. This type of vent serves a multi-purpose of pressure/vacuum release, safety overflow and flame arrester. Keep the screen in this vent fitting clean. Replace screen immediately if damaged or displaced.

The engine is only able to utilize 95 percent of the total fuel in the fuel tank, this is known as useable fuel. Allow 15 percent reserve useable fuel for running in heavy seas.

Fuel lines, tanks, filters and engine fuel system components should be checked at the start of each season and periodically thereafter, particularly after any work has been done aboard the boat which might have affected any part of the system. Be certain that all are in proper condition and that the entire system is fuel tight. Only a qualified marine mechanic should be allowed to work on the fuel system. Damage can be done to fuel system components by inexperienced or indiscriminate tightening of connections, including flexible fuel line sections.

#### Fueling Precautions

Certain precautions must be carefully and completely observed every time a boat is fueled.

#### Before Fueling:

- Be sure boat is tied securely to fueling pier.
- Turn off engine and other devices that can produce a spark.
- Close all hatches and doors to prevent fumes from entering enclosed spaces.
- Disembark all people not needed for the fueling operation.
- Prohibit all smoking on board and nearby.
- Have a fire extinguisher close by.

#### While Fueling:

- Do not leave boat unattended.
- Keep nozzle or can spout in contact with the fill opening to guard against static sparks.
- Do not spill fuel.
- Do not overfill. Filling a tank until fuel flows from the vent is dangerous. Allow room for expansion.

#### After Fueling:

- Close fill openings.
- Wipe up all spilled fuel. Dispose of rags on shore.
- Open all hatches and doors. Ventilate boat for at least 10 minutes.
- Check for fuel fumes in the bilge, ventilate until odor can no longer be detected. Check for any drips.

## Oil Injection System

Marine outboard two cycle engines require an oil and gasoline mixture to be used in the fuel system. Oil is precisely mixed with gasoline by an automatic oil injection system.

REFER TO ENGINE OWNER'S MANUAL FOR CORRECT OIL REQUIREMENTS FOR ENGINE OPERATION.

The oil injection system has a built-in test alarm which sounds momentarily as a test whenever you switch the key from "OFF" to "ON". The alarm sounds intermittently to let you know when the oil level is low. The alarm sounds steadily to indicate engine overheating. DO NOT IGNORE ALARM. Permanent damage to engine can result if the cause is not immediately identified and corrected.

## Starting Your Engine

Before operating your engine, read the engine owner's manual thoroughly. Certain break-in procedures must be followed.

- 1. Always check bilge by visual inspections and smell for fuel leaks and vapors.
- 2. Check the oil level in the oil injection tanks for sufficient oil level. REFER TO ENGINE OWNER'S MANUAL FOR CORRECT READING.
- 3. Place engine in normal running position making sure the water pump intake is below the water surface.
- 4. Squeeze fuel primer bulb until it is firm.
- 5. Shift outboard into NEUTRAL. Engine start system is equipped with a neutral start circuit whick will not allow engine to start if it is not in neutral.
- 6. Turn ignition key clockwise to START and push in on key switch to activate CHOKE. As soon as engine starts, release key and allow switch to return to RUN position. Note: If engine is warm, do not push in on key switch, the engine should start without using the CHOKE

Important: Do not continue to operate starter more than 10 seconds without pausing to allow starter motor to cool off for 2 minutes. This also allows battery to recover between starting attempts.

7. Check engine RPM on tachometer as soon as engine starts. Do not allow RPM to exceed 2500. Move throttle lever to decrease RPM.

8. Additional choking may be required to keep engine running until warm.

#### After the engine is running:

- 1. Check for proper water circulation by a steady stream of water from the water pump "tell tale". If intermittent or no flow is observed, STOP ENGINE IMMEDIATELY. Check "tell tale" often during operation.
- 2. Make a visual inspection for any leaks related to fuel, exhaust or oil and correct as necessary. All engine and electrical equipment should be shut off if fuel leaks are found.
- 3. Water test the boat after properly warming up the engine. Drive at top speeds for only a moment, if your are in open waters and conditions permit such practice, to note maximum RPM developed and general operation of the boat, its instruments, and engine. Follow detailed instructions on Engine Break-In in the engine operator's manual.

REFER TO THE ENGINE OPERATOR'S MANUAL FOR DETAIL-FD INFORMATION ON YOUR NEW ENGINE.

## **Electrical System**

## D.C. System

The 12 volt direct current (D.C.) electrical system derives its power from the batteries, which are kept charged by an engine-driven alternator.

The negative terminal is attached to the grounding studs of the engine. This negative ground system is the approved system for marine D.C. electrical systems. Additional equipment must be adaptable to this system, and when installing, it will be necessary to stipulate that each item's current supply be taken from the 12 volt distribution buss bar. If additional circuit protection is required, it should be added in that area.

Enlist the aid of your dealer for a careful analysis of D.C. power needs on your boat. It may be necessary to add batteries or auxiliary charging methods to supply adequate power for the additional accessories you require.

#### **Batteries**

The batteries in your WAHOO! have been selected for their ability to furnish starting power based on the engine starting requirements.

Always disconnect battery cables before doing any work on the engine's electrical system or alternator wiring to prevent arching or damage to the alternator.

#### To remove the battery cables:

- 1. Turn OFF all items drawing power from the batteries.
- 2. Turn OFF battery switch. (The battery switch is optional on some models.)
- 3. Remove the positive cable first, then the negative cable. To replace the cables, reverse the procedure.

#### Battery Maintenance:

Check the fluid levels in the cells approximately every 4 weeks, and more often in summer and in hot zones.

The fluid level must be between the lower and upper markings.

Only replenish with distilled water. Do not use metal funnels.

Coat battery terminal clamps with acid-proof grease. Keep battery clean and dry.

Only use a battery charger designed to charge automotive/marine type batteries when batteries are disconnected from the boat's electrical circuit.

Batteries in storage or idle for months should be kept under trickle charge or fully charged once a month.

Never use an open flame in the battery storage area.

Avoid striking sparks at battery terminal.

A battery will explode if a flame or spark ignites the free hydrogen given off during charging.

# CAUTION

While the engine is running the battery terminal clamps must not be loosened or detached nor should the battery switch (es) be turned off otherwise the alternator and other electronics will be damaged.

#### 12 Volt Lights

Switches for the navigation lights and cockpits lights are located on the helm switch panel.

The gauge and compass lights are turned on when navigation lights are turned on.

#### **Navigation Lights**

Navigation lights must be displayed while underway from sunset to sunrise. The term "underway" denotes not at anchor or dock. Trolling or drifting with power off is considered underway and normal running lights must be displayed. At anchor, in open water, a 32 point white anchor light must be displayed.

To operate running lights, push up on the "NAVIGATION LIGHTS" switch. To operate anchor light push down on the "NAVIGATION LIGHTS" switch.

#### Wire Color Code

#### Engine Harness

16 AWG Pink, fuel sender

16 AWG Brown/White, power trim sender

16 AWG Gray, tachometer sender

16 AWG Purple, ignition

16 AWG Yellow/Red, start circuit

14 AWG Red, engine hot

14 AWG Black, engine ground

16 AWG Tan/Blue, engine temperature alarm

16 AWG Black/Yellow, safety laynard switch

16 AWG Yellow/Black, auto choke

#### Battery Wiring

4 AWG Red, battery cable (positive)

4 AWG Black, battery cable (negative)

#### Lights

16 AWG Gray, bow light

16 AWG Gray/White, anchor light

16 AWG Blue, accessory lights, gauge lights

16 AWG Black, compass

#### Stereo

18 AWG Brown, right speaker, positive

18 AWG White, right speaker negative

18 AWG Yellow, left speaker, positive

18 AWG Green, left speaker, negative

16 AWG Red, power

16 AWG Black, ground

## Bilge Pump

16 AWG Brown/Red, auto mode

16 AWG Brown, manual mode

16 AWG Black, ground

## Electrolysis & Zinc Anodes

Electrolysis corrosion of metals on power boats can result in serious deterioration of metal underwater parts. The boat owner must be aware of the possibility of galvanic action (the deterioration of metals due to dissimilar characteristics when placed in

salt water) and/or electrolysis. It is the owner's responsibility to check for and replace damaged parts due to galvanic deterioration.

Zinc anodes are installed to protect underwater hardware. Zinc, being much less "noble" than copper based alloys and aluminum used in WAHOOI underwater fittings and engine drive units, will deteriorate first and protect the more noble metals.

Zinc anodes generally require replacement annually. In salt water areas, replace every six months. The need to replace anodes more frequently may indicate a stray current problem within your boat or at the slip or mooring. If zinc anodes do not need replacing after one year, they may not be providing proper protection. Loose anodes or low-grade zinc may be the problem.

DO NOT PAINT BETWEEN THE ZINC AND METAL IT CONTACTS, AND DO NOT PAINT OVER THE ZINC.

When bottom painting your boat using copper based bottom paint, leave a 1" border around the outboard bracket on the transom. The copper in the paint will cause adverse affects to the aluminum bracket. The 1" border should be painted with tin based outdrive clear anti-fouling.

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# **Plumbing Systems**

#### Livewells

The livewell for the WAHOO! draws its water from the transom of the boat through a slotted water pick-up. The water for the livewell is delivered to the livewell via a 12 volt pump that is controlled by the switch marked "Livewell" on the helm switch panel. This pump is protected by a fuse that also is mounted on the helm switch panel. The water is dispersed into the livewell either by an adjustable spray head or a spray rail, depending upon model. Water flow can be adjusted on both types. The spray head type is adjusted by turning the flow adjustment knob on the front of the spray head. The spray rail type has an in-line adjustment valve between the hose connection and the spray portion of the rail. To stop the flow of water completely to the livewell, shut the pump off via the switch on the helm. DO NOT SHUT FLOW OF WATER OFF BY THE FLOW ADJUSTMENT VALVE AS THIS COULD DAMAGE THE PUMP AND THE LIVEWELL SUPPLY PLUMBING.

The livewell is equipped with either and overflow fitting in the side of the box which is located next to the spray head but mounted lower in the box or a overflow tube which fits into the drain fitting in the bottom of the livewell. For livewells with the overflow tube, install the tube into the drain fitting. This will allow the livewell to fill up to the overflow tube level thus allowing storage of live bait. For the livewell with the overflow fitting in the side, the livewell has a drain in the bottom. In order for your livewell to hold water for storage of live bait, this drain must be plugged using the factory supplied adjustable rubber stopper.

## Accessories

#### Cooler

(1650CC, 1750CC, 1900CC, 2000CC Only)

The cooler on the WAHOO! is located forward the center console. It is secured by bungi cords on both sides. The bungi cords attach to the cooler and the eye pad on the liner. The removable cushion on top of the cooler is attached by velcro strips or snaps, allowing the cooler to serve as additional seating.

#### Canvas

The WAHOO! is available with various optional canvas pieces. For more information regarding care and maintenance see "Care and Maintenance" Section in the manual.

## Care and Maintenance

The following tables contain general parameters that cover the areas requiring periodic maintenance. If more detailed information is required on a particular subject, please consult your authorized dealer.

ITEM	CARE	AVOID
Blige	Keep clean and dry, Use local car wash, liquid household cleaner or a commercial bilge cleaner. RINSE THOROUGHLY with fresh water.	Accumulations of debris or oil which can create a fire hazard.
Bilge Pump	Periodically check inlet to keep debris from clogging the pump.     Check the discharge hose for kinks or collapsed areas.	Running the pump dry for prolonged periods of lime.
Batteries	1. If not used regularly, "trickle/float" charge to keep it ready for use. 2. Check electrolyte level at least once a month. Refill w/ distilled water. 3. Clean terminals regularly. 4. Use non-metallic battery boxes to prevent accidental spillage of electrolyte. 5. Secure the batterles and battery boxes in position and check frequently.	Overfilling batteries as loss of electrolyte will occur.     Allowing the electrolyte level in any cell to drop below the top of the plates. Such an occurrence results in permanent damage and reduced performance.
Fuses	Eilher glass fuses or automotive-type fuses are used in conjunction with exclusively designed wiring harnesses. If you add additional accessories, obtain auxillary circuit kits from your dealer.	Installing additional electrical equipment without first consulting your authorized dealer.     Overloading circuits or bypassing 2 wire ground system.
Engine	Follow maintenance instructions and schedules in engine owner's manual. Observe all warnings in the engine owher's manual,	
Finish	Rinse with clear water to remove surface dirt.     To remove stubborn grease, oil, or dirt use a commercial hull cleaning solvent.     Be a quality marine wax at least once a year to restore luster to linish.	Using abrasive cleaners.     Using dirty cleaning cloths
Safety Glass	Clean with either glass cleaner or ammonia water.	
Plexiglass	Flush (don't rub) loose dirt from the windshield with clear water only. After all dir! is removed, use plexiglass liquid cleaner.     Remove minor scratches with a plexiglass polish compound.	Wiping dirt from a dry windshield.     Use of any type of abrasive cleaning agents or harsh chemical solutions.

ITEM	CARE	AVOID
Fuel System	Keep tanks filled to prevent condensation.     Periodically check fuel tank for leaks or nicks.     Have your authorized dealer inspect all fuel hoses, connections, and fillings for leaks, deterioration, and corrosion, annually.     Change or service fuel filter annually	Smoking or open flames when fueling.     Fueling if the gas gauge is not working.     Fueling if the vent screen is obstructed.
Upholstery	Use a vinyl cleaner and vinyl protective wax to keep uphoistery clean and pilable. Use plastic seat covers when boat is not in use to keep moisture out of the seat foam.	Harsh detergents, solvents, and bleaches which can cause permanent damage.
Sleering System	Have your authorized dealer inspect and lubricate your steering system at the start of each boating season.	Difficult steering by keeping the output ram greased.
Trailers	Maintain proper air pressure in tires.     Check lightness of all nuts and bolts before each trip; including lug nuts.	Cleaning with harsh chemicals and abrasives.
	3. Add wheel bearing grease as needed. 4. Inspect wheel bearings annually. 5. Check lights before each trip. Replace inoperative lights. 6. Clean trailer using same guidelines for your boat's finish. 7. For trailers equipped w/ brakes: check brake fluid level regularly; periodically check manual release and emergency cable for proper operation.	

Proper maintenance of your boat, motor, trailer, and equipment will add to your boating enjoyment. Also, maintaining its beauty and mechanical reliability will cause your rig to retain its value longer and at a higher level, all while provide years of reliable service.

DO NOT LEAVE YOUR BOAT IN WATER FOR EXTENDED PERIODS OF TIME UNLESS ANTI-FOULING PAINT HAS BEEN APPLIED AS GELCOAT BLISTERING MAY OCCUR.

## Fiberglass Repair

Unless your are well trained in fiberglass repair, it is suggested you have fiberglass repairs made by a qualified fiberglass repair shop.

## **Engine Maintenance and Repair**

It is strongly suggested that you have all maintenance and repair of your engine performed by a FACTORY AUTHORIZED AND CERTIFIED MECHANIC.

## Storage

When storing your boat for long periods of times such as over the winter, you should perform the following:

- Remove wet gear. Allow the boat and gear to dry thoroughly before storing.
- Rinse the bilge thoroughly with fresh water. Clean the boat inside and outside and wax. Flush windshield with mild, soapy water. Rinse and allow to dry. Cover against direct sunlight if stored outside.
- Have the engine serviced for storage by a qualified mechanic according to the engine owner's manual.
- Remove batteries to warm, dry storage area. Recharge monthly during storage.
- Drain fuel tanks. Gasoline left in tanks will from gum-like deposits and present a fire hazard. Pour a gasoline soluble, capillary-action rust inhibitor into the fuel tank.
- Drain the bilge pump and hoses.
- Remove the transom drain plug and store with boat with the bow raised higher than the stern.
- If the boat is stored for more than six months, block the trailer off the ground or garage floor so that weight is not on the tires.
- If your stored boat is covered, provide adequate ventilation to avoid moisture build-up from condensation.
- Ensure all drain hoses are free of water

# **Appendix**

#### **Nautical Terms**

abeam - object 90 degrees to center line on either side of boat.

abaft - a point on a boat that is aft of another

aft - toward the rear or stern of the boat

beam - the width of a boat

bow - the fore part of a boat

bulkhead - vertical partition in a boat

chine - meeting juncture of hull topside and hull bottom of boat.

<u>chock</u> - deck fitting, used as guides for mooring or anchor lines
 <u>cleat</u> - deck fitting with arms or horns on which lines may be made fast

<u>cockpit</u> - an open space aft of a decked area from which a boat is steered

deck - upper structure which covers the hull

draft - depth of water required to float boat

fathom - six feet

freeboard - height of topside from water line to deck

qunwale - meeting junction of hull and deck

hatch - an opening in deck to provide access below

head - toilet or toilet area in boat

<u>headroom</u> - vertical distance between the deck and cabin or canopy top

<u>helm</u> - steering console

<u>hull</u> - the basic part of a boat, watertight vessel that provides buoyancy to float the weight of the craft and its load

keel - the major longitudinal member of a hull, the lowest external portion of a boat

knot - unit of speed in nautical miles per hour

lee - the side that is sheltered from the wind

port - the left side of the boat

**scupper** - holes permitting water to drain overboard from deck or cockpit

<u>sheer</u> - curve or sweep of the deck as viewed from the side <u>starboard</u> - the right side of the boat

stern - the aft end of a boat

<u>stringer</u> - longitudinal members fastened inside the hull for additional structural strength

<u>topside</u> - the top portion of the outer surface of the hull on each side above the water line

transom - vertical part of stern

<u>wake</u> - disturbed water that a boat leaves behind as a result of the forward motion

windward - toward the direction from which the wind is blowing

# Notes



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