

GRADY-WHITE BOATS

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Greenville Blvd. NE, Greenville, NC 27834
919/752-2111 FAX: 919/752-4217

Dear Grady-White Owner:

Welcome aboard!

Buying and owning a boat is a very special experience. Of all the many products you'll ever own we want your Grady-White experience to be the absolute best. That means providing you the descriptions, explanations and technical support that you need to enjoy your Grady-White with confidence and security.

Your Grady-White exceeds all U.S. Coast Guard safety standards and is built to standards certified by the National Marine Manufacturers Association (NMMA). Best of all, your boat is built to Grady-White standards, standards that have served our owners through some truly extraordinary conditions since our first models built in 1958.

The seaworthiness and safety of your Grady-White is highly dependent on your operation, maintenance and care of your boat, so please read this manual thoroughly and keep it around for reference. Moreover, if you need further explanation or "hands-on" help don't hesitate to ask the people at your Grady-White dealership; they have experience with the systems and operations of your boat. If for any reason you need further help, please feel free to call us at the factory. We sincerely want to provide you with the help and information that will make your Grady-White experience delightful.

Thanks for choosing a Grady-White. All of us at the factory and at your dealership are dedicated to earning your confidence in Grady-White Boats. Again, welcome aboard.

Sincerely yours,

GRADY-WHITE BOATS, INC.



Kris Sheppard
President

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WARRANTY

CHAPTER ONE

SAFETY

1-1

REQUIRED SAFETY EQUIPMENT

The US Coast Guard (USCG) requires that every boat have specific equipment on board. Refer to the US Coast Guard publication CG-290 for more information on Coast Guard required safety equipment. Some local regulations request more equipment than this list of the USCG requirements:

FIRE EXTINGUISHER

Every boat should be equipped with a fire extinguisher that is approved for marine use. It should be classified to extinguish Type B (gasoline, oil or grease) fires. Your fire extinguisher should be readily available. Passengers should be informed of its location and proper use. Check extinguisher periodically for status of charge.

PERSONAL FLOTATION

All passengers must have a US Coast Guard approved personal flotation device (PFD). PFDs must be obtainable at anytime. PFDs must be in good condition and the appropriate size for the intended wearer. **Small children and non-swimmers are advised to wear a PFD at all times.** In addition to PFDs, a Type 4 throwable flotation device such as a ring buoy or boat cushion is also required.

HORN

All Class 1 boats are required to carry a hand, lung, or power operated horn that is audible for at least one mile. If your Grady-White is equipped with a horn, it meets USCG requirements.

VISUAL DISTRESS SIGNALS

USCG approved visual distress signals are required when operating on U. S. waters. When boating, these devices should be functional. Examples include: flares, orange smoke, orange flag (day use), or an electric distress light (night use).

REGISTRATION NUMBERS

Federal and state laws require a power boat to be registered in the state where it is primarily used. Registration numbers and validation stickers must be displayed according to regulations. The registration certificate must be on board when boating. The boat's serial number, required on the registration form, is found on the upper right hand corner of the transom.

LIGHTING

All Grady-White boats are equipped with navigational lights that meet requirements for inland and international waters.

ADDITIONAL RECOMMENDED EQUIPMENT

In addition to the required safety equipment, the following tools, equipment and spare parts are recommended:

Anchor and anchor line	Hand operated bilge pump
Sea anchor	Extra keys
Boat hook	Marine electronics
Fenders (2)	Extra drain plug
Mooring lines (2)	Oar or paddle
Spotlight or flashlight	Insect repellent
Spare fuses	Drinking water and food
First aid kit and Sun screen	Spare propeller and hardware
Compass and navigational charts	Bucket and sponge

Tool kit including: adjustable wrench, slip-joint pliers, spark plug wrench and spark plugs, screwdrivers (slotted & Phillips), box end wrench set, hammer, roll of flexible wire, electrical tape, knife, prop nut, and hydraulic fluid. Keep tools and spare parts in good condition. Replace any parts removed from spare parts kit.

Use US Coast Guard approved or marine certified parts only.

Do not attempt any repairs or maintenance you do not understand or have proper tools to perform. Contact your Grady-White dealer or another reputable service center.

ACCIDENT REPORTING

Report all boating accidents to your local authorities. Federal regulations require boat operators that are involved in an accident to submit a written report within 48 hours. A written report must be filed if any of these conditions apply: a person disappears or dies within a 24 hour time span, requires medical attention and/or there is damage or a complete loss of property. When property damage exceeds \$500, the report must be submitted within 10 days. **In the event of death or disappearance, notification is required immediately** by phone or radio, in addition to the written report. These reports can be submitted to the State Boating Law Administrator. Forms can be obtained through USCG, local harbor patrol offices, sheriff, and police stations.

RENDERING ASSISTANCE

The owner or operator of a vessel is required by law to render all practical or necessary assistance to any person or vessel affected by collision, accident or casualty. **However, you should not endanger your vessel or passenger to render assistance.**

BOATING SAFETY TIPS

The following precautions will add to you and your passengers' boating safety and pleasure:

- Before operating your Grady-White, **READ AND STUDY ALL OPERATION AND MAINTENANCE MANUALS**. It is important that you fully understand how to operate your boat. If you have any questions, contact your Grady-White dealer. Proper operation and upkeep will insure quality performance and longevity of your boat.
- A written float plan left with a **RESPONSIBLE** person can serve as valuable information in the event of a mishap and you do not return as scheduled. Upon returning, your primary responsibility is to notify the person of your return and cancel the float plan.
- **NEVER** operate or allow anyone to operate your boat while under the influence of drugs or alcohol.
- Watch the weather and do not go out when there are storm warnings. If you are caught in a storm, reduce speed, head into the wind/waves, and keep all gear and passengers close to the center line of the boat for stability. Wear personal flotation devices and head for the nearest shelter.
- Instruct at least one passenger on the fundamentals of basic boating and safe operation in the event of an emergency.
- While boating, passengers should be settled in a safe position. Use handholds and rails for steadiness.
- Signs and signals for help are: raising and lowering your arms, waving a shirt tied to a pole, repeatedly sounding your horn, flying your boats ensign upside down, or the lighting of flares.
- Keep your boat speed under control. Respect for other boaters and those on shore is common courtesy. The operator of a boat is responsible for injury or damage caused by the boat or the boat's wake (the wave the boat leaves behind). Your wake could swamp or damage a smaller craft and endanger its passengers. Stay alert to areas having signs posted **"No Wake Zones"**.
- Become familiar with the handling personality and limitations of your boat.
- **Never allow swimmers to enter or exit the boat with engines running.** A shift lever in neutral could become engaged accidentally, causing serious harm to swimmers.

Continued...

- When venturing into foreign waters, collect information on the boating area. Obtain a chart for new areas when possible.
- Clean water and air are responsibilities for all persons. Use litter containers on board and dispose of refuse properly. Know the local laws regarding the discharge of waste.
- Individuals under the age of 16 should not be allowed to operate your boat. Inexperienced drivers should have constant and direct supervision.

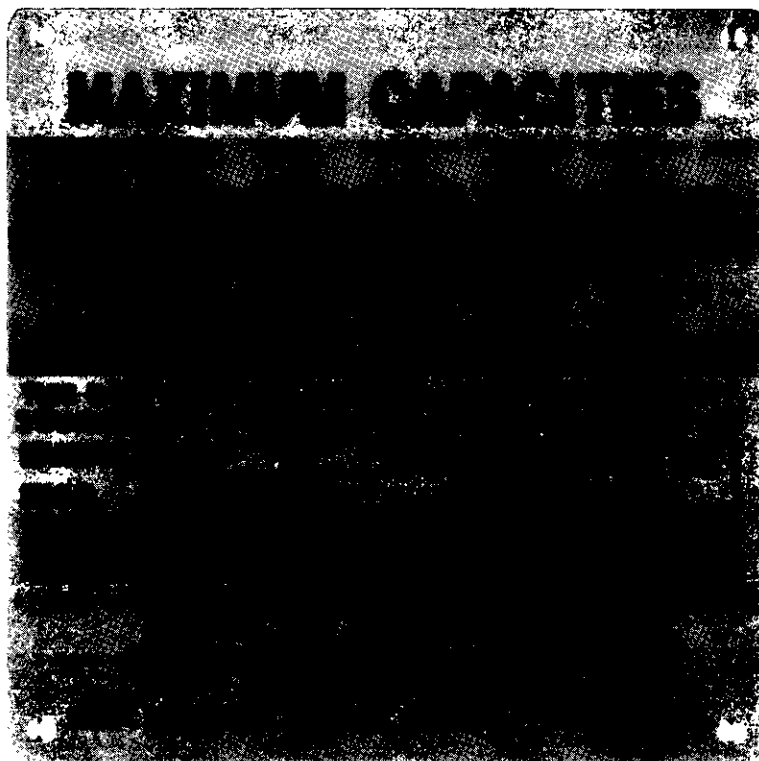
LOADING CAPACITY

Though overloading is a primary cause of many boating accidents, improper loading is equally hazardous. Boaters should not only pay attention to the amount of weight, but also the **distribution** of weight in the boat.

Near the steering wheel, you will find a metal Coast Guard Capacity Information Tag indicating the maximum weight and person capacity for your boat. This tag will also designate the maximum horsepower limit for an outboard. You and your passengers will be in jeopardy and your warranty void if any of these stipulations are exceeded.

The capacity plate does not release the operator from the accountability of rational judgment. The boat's capacity can be reduced due to rough water and adverse conditions. Maintain a watch on weather conditions.

Example: 208 Adventure
Capacity Plate





This label means that your Grady-White is certified by the NMMA (National Marine Manufacturers Association). With this tag, you are assured that your fuel system, lighting, ventilation, steering, flotation, capacities, and horsepower ratings are not only in compliance with the US Coast Guard regulations, but meet the more stringent standards of the NMMA. The NMMA is a national trade organization serving all elements of the recreational boating industry, as well as manufacturers of

boating equipment. With this tag, you can have complete confidence in the quality of your Grady-White.



CARBON MONOXIDE

W A R N I N G

Exhaust fumes contain carbon monoxide (CO), an odorless and colorless gas. Carbon monoxide is poisonous and a health hazard that can be fatal if breathed over an extended period of time. Symptoms of CO poisoning can include: dizziness, nausea, headache, sleepiness, vomiting, throbbing in temples, muscular twitching, and the inability to think clearly. **If you or anyone else experience these symptoms, immediately get away from fumes and into an area where plenty of FRESH air can be consumed. If any symptoms from above persist, seek medical attention.**

Carbon Monoxide is the gas formed by the combination of one molecule of carbon and one molecule of oxygen. Chemists refer to it as CO, its chemical formula, "C" for carbon and "O" for oxygen. Its weight is about the same as air, so it cannot be expected to rise or fall like some other gases, but will distribute itself throughout space.

Carbon monoxide can accumulate in cabins and under canvas. If your boat is equipped with canvas that encloses the aft cockpit and the propulsion equipment, **do not** operate the boat with this canvas closed.

The boat operator should be aware that CO is emitted from any boat's exhaust. The operation, mooring, and anchoring in an area containing other boats may be in an atmosphere containing carbon monoxide that is not of the operator's making. An operator, likewise, needs to be aware of the consequence of his actions on other boats. Of primary concern is the operation of an auxiliary generator with boats moored along side each other.



BE AWARE of the significance your exhaust may have on other vessels. Likewise, **BE AWARE** that the operation of other vessel's equipment may influence the carbon monoxide concentration on your vessel.

**SUGGESTED BOATING
CLASSES AND READING MATERIAL**

Like a car, boats must be operated according to safety rules and traffic regulations. Although we include some basic boating tips in this manual, a thorough review of the safety rules and regulations for boating is beyond the scope of this manual.

We support the work of the United Coast Guard Auxiliary and the United States Power Squadrons. We urge you to exercise the opportunity to attend any instructional classes sponsored by these organizations. For further knowledge on boating, we advise that you review the following publications:

PILOTING, SEAMANSHIP AND SMALL BOAT HANDLING
(Chapman)

Motor Boating and Sailing
Post Office Box 2319 -- F.D.R. Station
New York, New York 10022

PLEASURE BOATING AND SEAMANSHIP

US Coast Guard Auxiliary
306 Wilson Road Oaklands
Newark, Delaware 19711

BOATMAN'S HANDBOOK by Tom Bottomly
Motor Boating and Sailing
Post Office Box 2319 -- F.D.R. Station
New York, New York 10022

FOR MORE INFORMATION ON BOATING SAFETY COURSES IN YOUR AREA, CALL
BOATING EDUCATION HOTLINE 1-800-336-BOAT (2628),
US COAST GUARD BOATING HOTLINE 1-800-368-5647 or
CONTACT YOUR LOCAL COAST GUARD.

CHAPTER TWO

GENERAL INFORMATION

2-1



CAUTION

Safety during fueling requires CAUTION and COMMON SENSE. Please study the following precautions carefully, and ask your dealer if you have questions.

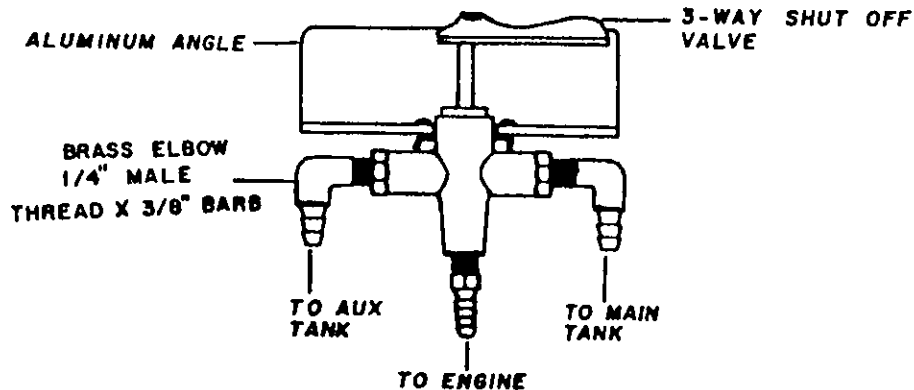
FUELING

- Check your engine manual to confirm the type of fuel specified by the manufacturer. Do not use gasoline containing alcohol. Alcohol in fuel will deteriorate the rubber material used to make up your fueling system. If you operate an outboard with an oil injection system, check the engine manual for the approved type of oil and fill the tank completely.
- Observe all safety regulations for the safe handling of fuel.
- Extinguish cigarettes and all other lighted materials.
- Before fueling, close all ports, hatches, windows, and engine compartments, to prevent fumes from accumulating in closed areas.
- Before fueling, turn battery select switch(es) to "OFF," this will stop all engines, motors, fans, and lights, etc.
- Keep the fuel supply nozzle in contact with the fuel tank opening to prevent any static sparks.
- Watch fuel flow constantly to prevent overflow or spills.
- Secure the fuel cap and check fuel lines and connections for leakage. Wash and clean any spilled fuel. Dispose of rags or sponges used for clean-up. Do not store these items on board.
- Ventilate all ports, windows, hatches, and other closed areas. Run blower a minimum of four minutes, or until all fumes are expelled from engine compartment (on stern drive models). Conduct a "sniff test" to make certain all fumes are vacant before using the battery select switch(es).
- Select your first tank cautiously. Take into consideration the distribution of your load as fuel is consumed. Performance will be influenced by weight distribution. If your boat is equipped with two fuel tanks, use the fuel select valve (see FUEL SELECT VALVE on next page) to select the proper tank.
- Remove the fuel compartment drain plug periodically, to drain water that may accumulate in this area (see page 5-4, TYPICAL BILGE DRAINAGE). The drain plug is located in the aft bilge compartment on the starboard side of the keel drain tube.
- Over-filled fuel tank(s) will leak fuel from vents, causing damage to the finish of your boat.

GENERAL INFORMATION

FUEL SELECT VALVE

If your boat is equipped with dual fuel tanks, you will have a manual fuel select valve installed. This valve allows you to choose from which tank fuel will be consumed. Select the tank that allows the best performance for your boat. Remember, as the fuel is consumed and the fuel load redistributes, performance will be influenced.



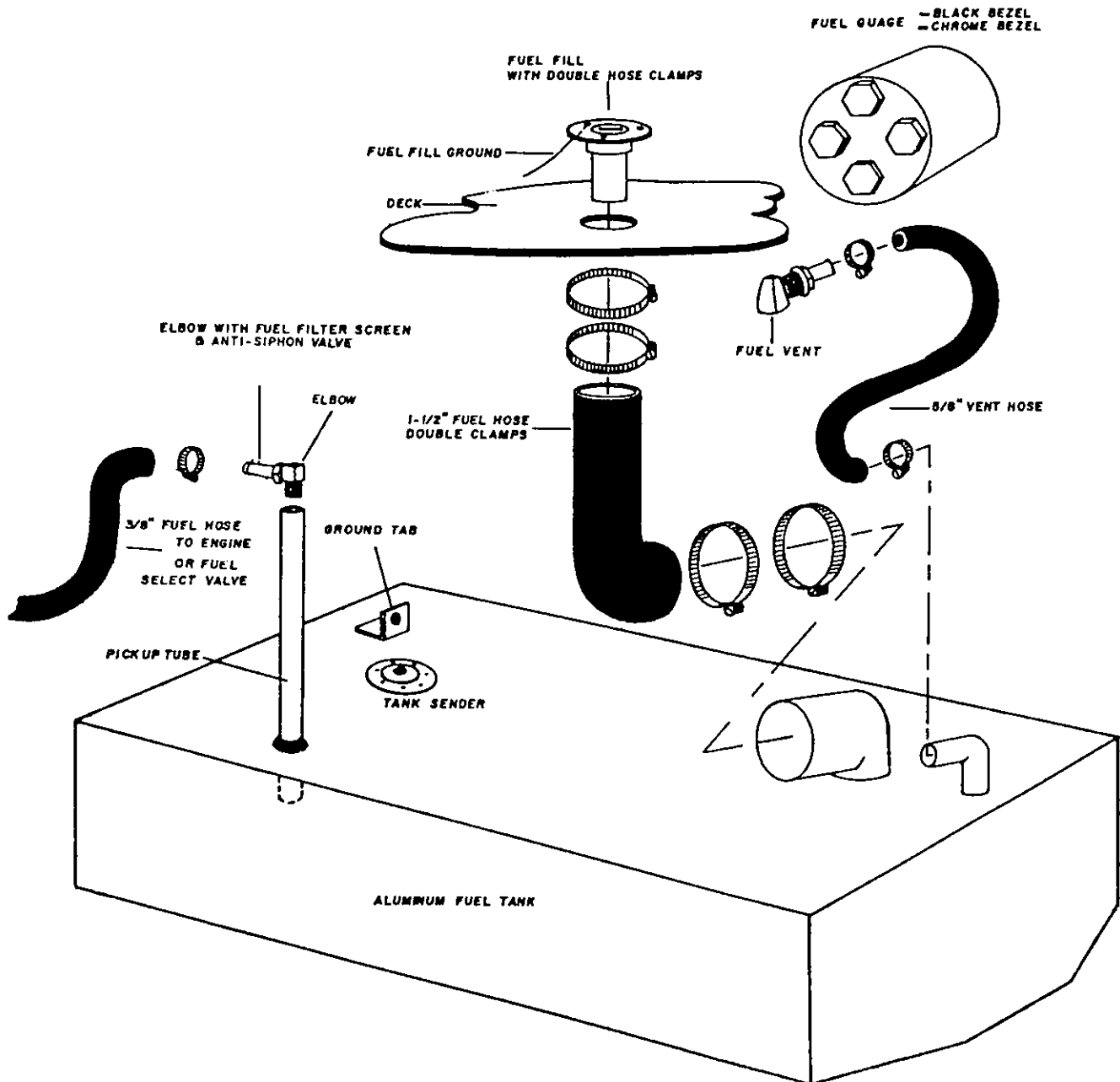
FUEL SYSTEM MAINTENANCE

If you are experiencing fuel flow problems, a simple method to determine if the problem is in your fuel system, is to connect a six gallon portable tank to your engine. Also, inspect the anti-siphon valve (pictured next page) to make sure fuel is flowing properly. The manual shut off valve should be closed when servicing the fuel system to avoid spilling fuel into the bilge.

**WARNING**

LEAKING FUEL IS A FIRE AND EXPLOSION HAZARD. THE USE OF ALCOHOL MODIFIED FUELS CAN CAUSE DETERIORATION OF THE FUEL SYSTEM. INSPECT SYSTEM REGULARLY. EXAMINE FUEL SYSTEM FOR LEAKS OR CORROSION AT LEAST ANNUALLY.

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Do not use fuels containing alcohol. Alcohol, particularly methanol, absorbs water, which makes fuel more corrosive to the metals in tanks and carburetors. Alcohol shortens the life of elastomers, such as hoses and gaskets.

After fueling, inspect the fuel lines, connections, and fuel tanks for tightness, signs of leaks, and deterioration. Annually, conduct a more precise inspection of fuel system components, especially those hidden from routine inspection. Replace any deteriorated hose, clamps, connections, or fittings.

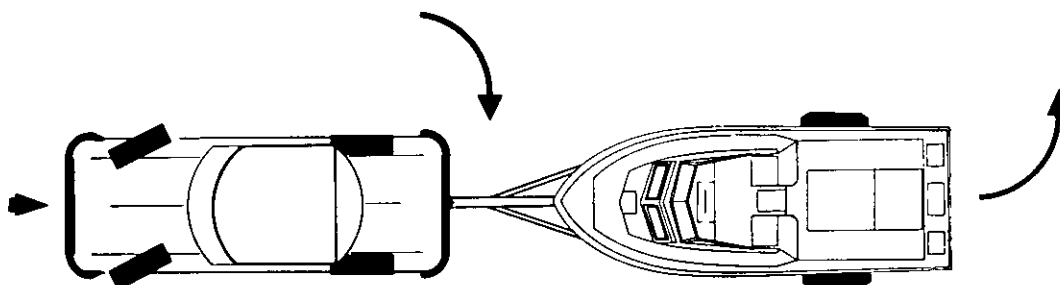
GENERAL INFORMATION

TRAILERING

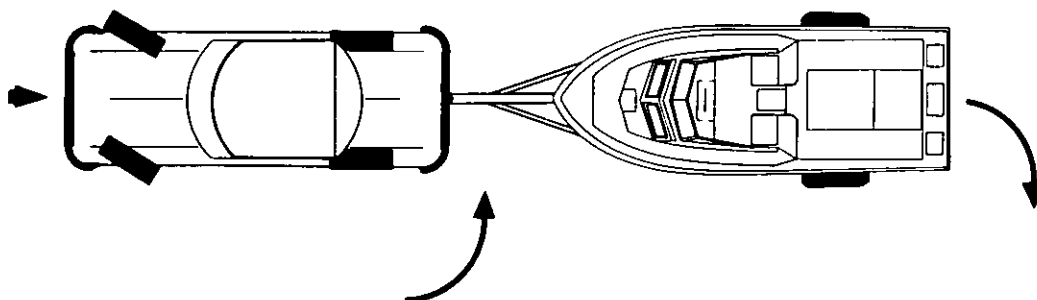
The adjustment and balance of your boat on the trailer determines how easily your boat may be transported. The tongue weight on the hitch ball should be 5-10% of the total weight of your boat, motor, and trailer. Tail-heavy loads cause swaying while trailering. The rollers and/or bunkers of your trailer should be adjusted so that the weight is distributed evenly across the stern and forward throughout the keel section. Your dealer should be responsible for adjusting your trailer properly.

The following list should be considered when establishing your final inspection prior to trailering:

- The hitch is tight and secure.
- All nuts and bolts are securely tightened and the safety chain is properly secured.
- The winchlocks and tilt mechanism are in the correct positions.
- The tires (including spare) are properly inflated and reliable.
- Signal, stop, and other lights operate properly.
- Gear and lines on the boat are properly secured for travel.
- Tie down straps are secure.
- The wheel bearings are properly greased (each year).
- All cabin windows and doors are secured.
- All canvas tops and side curtains are taken down and secured to prevent wind damage or loss in transit. Reference CANVAS (Storage) on page 4-4, if you have the folding top and side curtain feature.
- Motor is in the recommended travel position.
- Remove the mooring cover. (Damage to canvas during transit is not covered in warranty.)



BACKING TO RIGHT



BACKING TO LEFT

DRIVING

Do not allow passengers to ride in the boat while trailering. Check brakes prior to leaving. Drive as smoothly as possible and try to avoid sudden jerks. Anticipate sudden stops. Road trips require occasional stops to make sure the trailer is still secured properly.

Practice maneuvering the trailer. The trailer always backs in the opposite direction of the vehicle. To maneuver the trailer, turn the steering wheel in the direction you want the trailer to go. Refer to the illustration on the previous page.

LAUNCHING

Prior to initial launch, familiarize yourself with this manual and all aspects of your boat. At the launch site, go through a pre-launch checklist. The list should be suited to your specific needs, but the following items should be included:

- Make sure the drain plug is tightly in place.
- Attach the launch ropes to the bow and stern.
- Make sure the proper safety equipment is on board.
- Tilt the engine or drive unit to the "up" position.
- Remove the tie down strap.
- Make sure the engine drain and freeze plugs are in place. (Stern drives only)
- Be sure you have enough fuel to get to a fueling dock.
- Put the fenders over the side, if moving to a dock.

After the pre-launch check, back your trailer slowly into the water, preferably keeping the axle hubs above water (unless your trailer is a submersible model). Set the hand brake of your vehicle and place chocks under the rear wheels. Attach a bow line to the boat, release the winch cable, and give the boat a firm push. When the boat is clear of the trailer and secured to the dock, move the trailer to the parking area.

PRE-START CHECKLIST

- Check the bilge for excess water and leaks.
- Turn on the bilge pump to remove any excess water, and leave the pump on stand-by.
- Turn on the bilge blower (on stern drive models) and check for leaking fuel or fumes. Run the blower at least four minutes prior to starting. Conduct a "sniff test" as a precaution.
- Check the engine oil level, battery cable connections, electrolyte level, and all drive belts for wear and proper tension.
- Check the steering for freedom of movement.
- Make sure the navigation lights are in working order.

GENERAL INFORMATION

STARTING

- Lower the drive unit to the "down" position. Be sure the propeller is free of any obstruction.
- Set the control lever in the neutral position. Engage the neutral lock out button in the control handle and pump the control throttle forward 2 or 3 times. This will vary on some models, refer to your engine manual.
- Set control throttle slightly forward of straight up and turn the ignition key to start while simultaneously engaging the neutral lockout button.
- Check all instruments. If the oil pressure gauge does not respond immediately, shut off the engine.
- Test steering and throttle response at the dock.

DOCKING/UNDOCKING

Unlike an automobile, the stern of your boat reacts first when turning. A turn to the right will swing the stern to the left and vice-versa. Remember that turning your boat away from an object, such as a dock, will tend to swing the stern toward that object.

Before bringing your boat to the dock, consider the wind and how it may be used to your advantage. Your boat is more maneuverable against the wind than with the wind.

Slowly approach the dock at a 30 to 45 degree angle. Before the bow reaches the dock, shift the engine to neutral, turn the steering wheel toward the dock, and shift the engine into reverse. As the boat slows the stern will swing toward the dock.

When pulling away from the dock, push the stern clear of the dock to make sure you have enough room to maneuver. You can get underway without bumping the stern against the dock. Care should be taken when fending off with your arms and legs; they could become crushed between the boat and the dock.

Slowing and stopping your boat requires practice. The length of time required to come to a complete stop will vary with wind and current. Judging the distance between the boat and dock while considering the momentum of your craft is a skill that improves greatly with experience and practice.

RECOVERY

- Secure the boat to the dock or boarding platform.
- Clear equipment and passengers from the boat.
- Back the trailer into position -- (reference Launching).
- Use the bow line to maneuver the boat into position for loading.
- Load and secure the boat onto the trailer.
- Move the trailer and boat away from the ramp and remove the drain plug to allow water to drain from the boat.
- Complete cleanup and other safety measures before trailering.

TOWING OR BEING TOWED

In the event of a mishap or power loss, you may need to tow a boat or be towed. You should **not** tow a boat larger than your own. Never tow a boat if you are not equipped with the proper lines. Nylon ropes are recommended due to the strength and elasticity they provide to absorb the shock of towing that may occur. Passengers should never grasp a towline, it should be secured to the boat.

Before towing a boat, make a bridle and tie it securely to the pad eyes on the transom with enough slack to clear the engine and stern drive. Pad the line wherever it comes in contact with the boat to prevent chafing. Attach a tow line to the bridle so that it may slide from side to side, to prevent too much pressure on a single pad eye. The tow line should then be attached to the bow eye or a bridle on the towed boat. The tow line should be a minimum of twice the length of the towing boat, the longer the better.

When passing a towline to the other boat, do not try to run in too close. Send a light line or attach the towline to a life preserver to be collected. Be careful of the other boat's propeller.

The towed boat should keep someone at the wheel, to prevent the boat from swaying off course. Start the tow off slowly. A steady pull at a moderate speed should be used during tow. Watch the action of the towing boat. If too much slack develops in the towline and contact is imminent, turn in either direction to avoid hitting the stern.



WARNING

As a precaution, passengers on both boats, should stay clear of the towline, they could snap and fly in either direction causing injury.

GROUNDING

Smaller boats draw 12-15 inches of water. Most boats that become grounded, can be floated off with motor tilted to reduce the draft at the transom. Larger boats draw 15-20 inches of water, and should not be powered off. Sometimes a rocking motion, side to side, will break the suction of mud from the keel. Dispersing weight from the point the boat is grounded will assist.



CAUTION

Do not lower or start engines if the propeller is in mud or sand. Wait until the boat is refloated to avoid damage to the cooling system(s) of your engine(s).

When boating in water with tidal changes, keep in mind the water level fluctuations. If you are grounded on an incoming tide, you can wait until the tide is high enough to refloat your boat. However, if you are grounded on an outgoing tide, you should act quickly to refloat your boat. If this is not possible, set an anchor to keep the boat from being driven farther aground. The anchor can be set to counteract the wind or current. The anchor can also be used to help pull the boat free.

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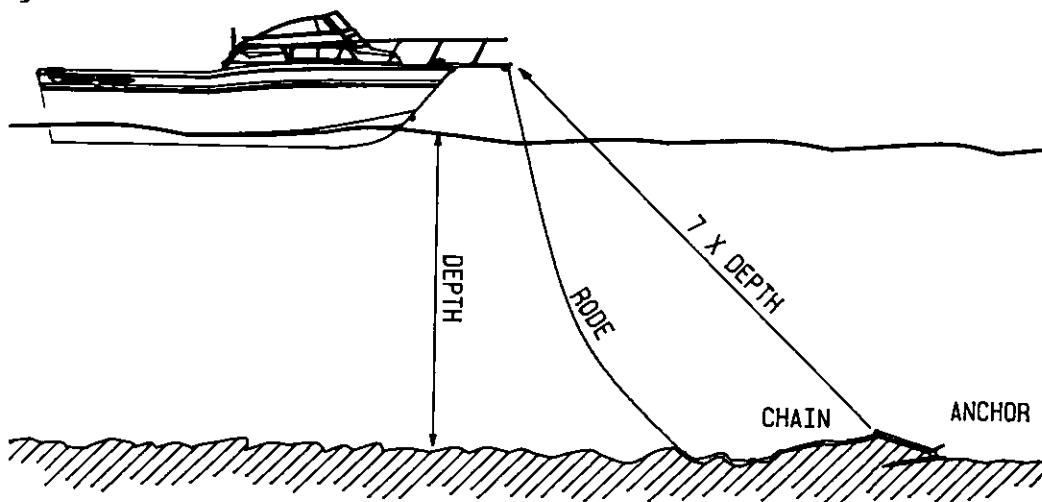
GENERAL INFORMATION

Many inland areas have rocks and stumps that could crack or puncture a fiberglass hull. Be familiar with the boating area. Caution should be taken in shallow water.

ANCHORING

Some factors that determine the size and type of anchor most suitable for your boat include the size of your boat and the type of lake, sea, or river bottom in your boating.

The anchor rode (line) length should be at least 4 to 7 times the depth of the water. Increase this length in strong winds and currents. A 3 to 4 foot length of chain between the anchor and the anchor rode will help prevent the line from chaffing on rough obstacles, and will also help hold anchor flukes down for more secure anchoring.



To anchor, pilot the boat into the wind or current to stop the forward motion. Make sure your anchor line is secured to a cleat and runs under the bow rail. Lower the anchor into the water until it reaches the bottom. Feed out the anchor line slowly as the wind or current forces the boat backward. Reverse engine(s) if necessary. To make sure anchor is set, take a gradual strain off the rode then pull firmly before stopping the engine(s).

Even while anchored, your boat will swing with the wind, so do not anchor close to other boats or objects. Furthermore, it is illegal to tie your boat to navigational aids, such as buoys and markers.

To retrieve the anchor, slowly drive the boat to the point directly above the anchor and pull upward on the anchor line until anchor is retrieved. If the anchor is difficult to break out, tie off the anchor line while directly over the anchor and slowly motor forward to "break" the anchor free.

WARNING

Never anchor off the stern of the boat, especially in strong winds or currents. The weight of the stern and flat surface to the seas can easily cause water to enter over the transom, and swamp the boat.



GENERAL INFORMATION ON BOAT HANDLING

The best method of learning how to handle your Grady-White boat and obtaining the best performance from your boat, is to practice and experiment. After several hours of operation, you should experiment with the throttle settings to discover the setting that will be the most comfortable and economical range for your particular load conditions.

We suggest that you make a speed and RPM chart to obtain the most economical operation. Operate the boat at various speeds and check the fuel consumption. Compute the amount of operating time remaining when the fuel gauge drops into the red band. Make a log of this type of information and have it available when operating your boat.

Further statistics you may want to determine for valuable information could include the following:

- Minimum speed for effective steering.
- Turning radius at different speeds.
- Response to steering at low speeds.
- Accelerating and deceleration rates.
- Time and distance to bring the boat to a stop at different speeds.
- Control of the boat using both engines in close quarters.

TWIN ENGINE BOATS

Twin engines boats are easy to maneuver. The boat will run ahead or backward in a straight line, when both engines are working together at the same speed. During backing, the engines can be used to steer to port as well as starboard.

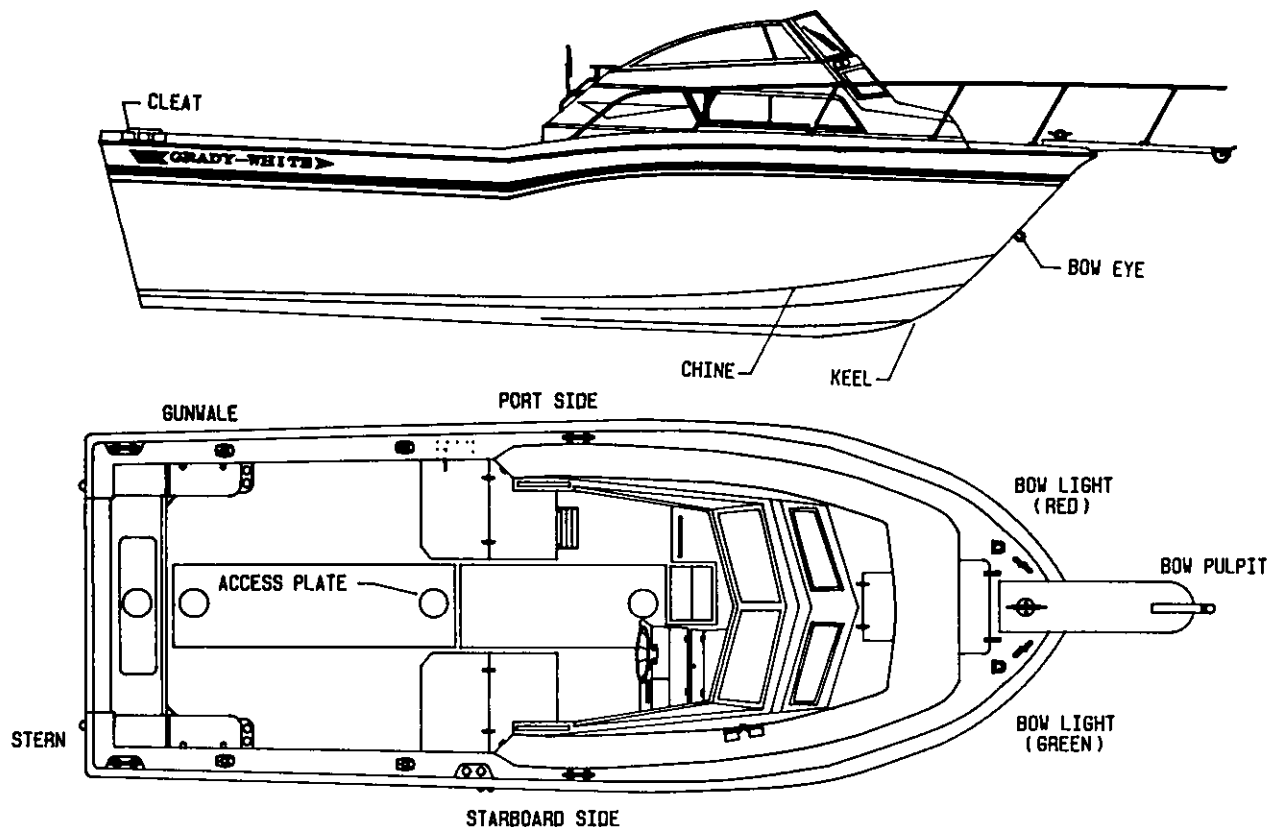
Moving ahead on one engine will cause the bow to swing away from the running engine side and to move forward at the same time. Backing up with one engine will cause the bow to swing toward the running engine side and the boat to move backward.

Running one engine ahead and one engine astern will cause the boat to turn end-for-end in little more than its own length.

Running both engines in the same direction at different speeds will cause the boat to move in the direction dictated by the faster engine but its influence will be modified by the slower engine.

GENERAL INFORMATION

COMMONLY USED NAUTICAL TERMS



ABEAM - A line perpendicular to a boat's keel

ACCESS PLATE - A removable, watertight cover that provides quick entry to enclosed areas for maintenance or visual inspection

AFT - Toward the rear or stern of the boat

BEAM - The greatest width of a boat

BILGE - The lower interior area of the hull

BOW - The fore part of a boat

BOW EYE - A U-shaped hull fitting used to attach the trailer winch to the boat

BULKHEAD - Vertical partition in a boat

CHINE - Meeting juncture of topside and bottom of boat

CLEAT - Deck fitting with arms or horns on which lines are fastened

DECK - Upper structure which covers the hull

DRAFT - depth of water required to float a boat

FATHOM - A depth measurement equal to six feet

FREEBOARD - Height of topside from water line to the deck

GUNWALE (OR GUNNEL) - Meeting junction of hull and deck

HATCH - An opening in the deck to provide access below

HEAD - A toilet or toilet area in a boat

HEADROOM - Vertical distance between the deck and cabin or canopy top

HULL - The basic part of the boat; a 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

LIST - The tilt or lean to one side

PORT - A term designating the left side of the boat when facing forward

SCUPPER - Holes permitting water to drain overboard from deck or cockpit

SHEER - Curve or sweep of the deck as viewed from the side

STARBOARD - A term designating the right side of the boat when facing forward

STERN - The rear end of a boat

STRINGER - Longitudinal members fastened inside the hull for additional structural strength

WAKE - The track or path left in the water by a moving boat

WINDWARD - Toward the direction from which the wind is blowing (against the wind)

CHAPTER THREE

PERFORMANCE

3-1

Maximum performance is dependent on many factors and cannot be guaranteed. These factors will vary with altering conditions. Some of these factors are:

ENGINE EFFICIENCY

Assuming your boat is equipped with the correct engine, the engine is properly tuned, and the drive system is in good condition, engine(s) operate most efficiently at the RPM stated in the engine manual. Efficiency will decrease if normal care and maintenance are not performed. If engine(s) are neglected, power will drop and speed will decrease. In addition, expensive repairs may become necessary. Be sure to follow all instructions in the engines' Operation Manual.

WEATHER CONDITIONS

Weather conditions influence engine performance. Barometric pressure and humidity both affect horsepower also. The increasing change of weather alone could amount to a 10% loss in horsepower on some hot days.

LOAD DISTRIBUTION

A decrease in performance will be noted when gear, equipment, passengers, and fuel are added. This extra load will affect the performance of your boat according to the distribution of the weight.

Other types of extra load could be water in the bilge. A gallon of water weighs 8 pounds. When water accumulates in the bilge, performance will be affected. Keep the bilge dry to eliminate this type of extra load.

MARINE GROWTH

Maximum performance is only obtained when your hull bottom is clean. Growth on the bottom of the boat will increase resistance and decrease speed. This will also increase fuel consumption.

ENGINES

STERN DRIVE

If your Grady-White is powered by a stern drive engine, refer to the engine Manual for the operation and maintenance procedures. Complete the engine warranty card and forward it to the manufacturer.

OUTBOARD

Engines are an important aspect of your Grady-White boat. Details concerning the engines are located in the Operation and Maintenance manuals supplied by the engine manufacturer. Your familiarization with the engine reference material will result in the proper maintenance and operation that is essential to ensure safe and enduring engine performance. The manuals are in the boat package with other literature.

PROPELLER

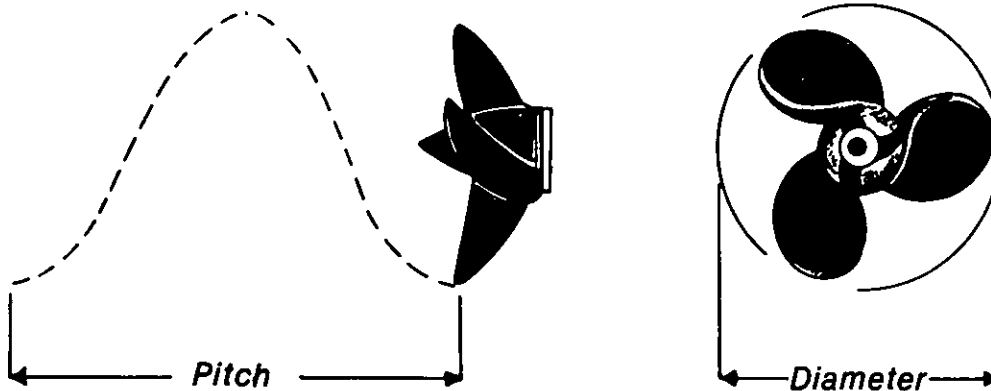
The condition of your propeller (prop) is a major influence on the performance of your boat. Your engine is equipped with the best size prop for normal conditions. If you have unusual uses or weight conditions, special props may be required for altered applications. It is advisable to keep an extra prop on board. A damaged prop can affect your boat's top speed, cause vibrations or a sudden drop in RPMs, or increase fuel consumption.



CAUTION

When replacing propellers, stay within the engine manufacturer's maximum and minimum RPM ranges. This information is in your engine Manual. If your boat does not have a tachometer, consult your dealer for propeller changes.

Cavitation occurs in all propeller driven boats under certain conditions. It is easily recognized by sudden increases in RPMs (revving) or a sudden drop in speed. This occurs when cavities or air pockets form around the prop, due to improper size or damage to the propeller. Cavitation is influenced by prop design, speed, placement, and even water temperature. Ventilation, a similar problem, caused by air drawn in around the prop in a tight turn or improper engine trim angle. In most cases, a change in the drive angle will correct the problem. If either of these problems persist, you are advised to experiment with a different size prop or contact your dealer.



Diameter and pitch are the two basic dimension of a propeller.

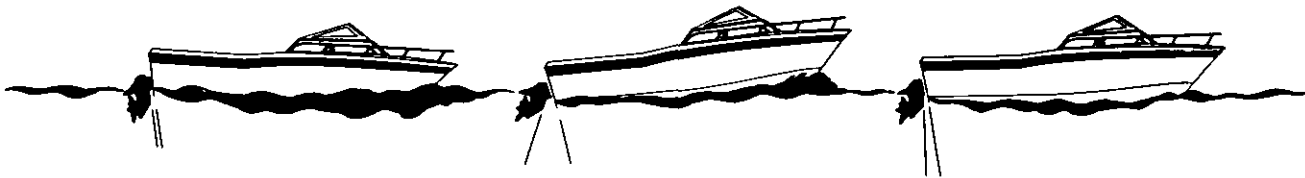
LOAD DISTRIBUTION

The performance of your boat is directly affected by the distribution of weight on board. Be aware of the distribution of gear, passengers, and fuel.

TRIM

Stern drive models and many outboard models are equipped with power tilt and trim mechanisms. The purpose of the tilt is to raise the engine for launching, loading, or trailering your boat.

Trim refers both to the weight distributions inside the boat and to the angle of thrust of the drive unit. The angle of thrust of the drive unit either forces the bow up or down. A drive unit tilted too far in (forward) will cause the bow to nose downward or "plow." A drive unit tilted too far out (aft) will cause the bow to ride too high. Adjust the trim so that the angle of thrust is parallel to the water at full throttle at a normal running attitude.



INCORRECT
Causes boat
to "squat"

CORRECT
Gives maximum
performance

INCORRECT
Causes boat
to "plow"

When the angle of thrust is too far out (aft), the engine noise may rise indicating that the propeller is cavitating. Adjust the engine trim in (forward) to correct the problem. The boat may also tend to "porpoise" in maximum bow up position as well. This can be corrected by adjusting the engine trim in and trimming the bow down.

For a smoother ride when running into heavy seas, the bow should be adjusted so that the entry point into the water is slightly forward of the helm location. When running in a following sea, the bow should be trimmed higher to prevent the boat from plowing into the seas. As sea conditions change, experiment with the trim to find the best performance for your particular boat and load.

THROTTLE/SHIFT CONTROL

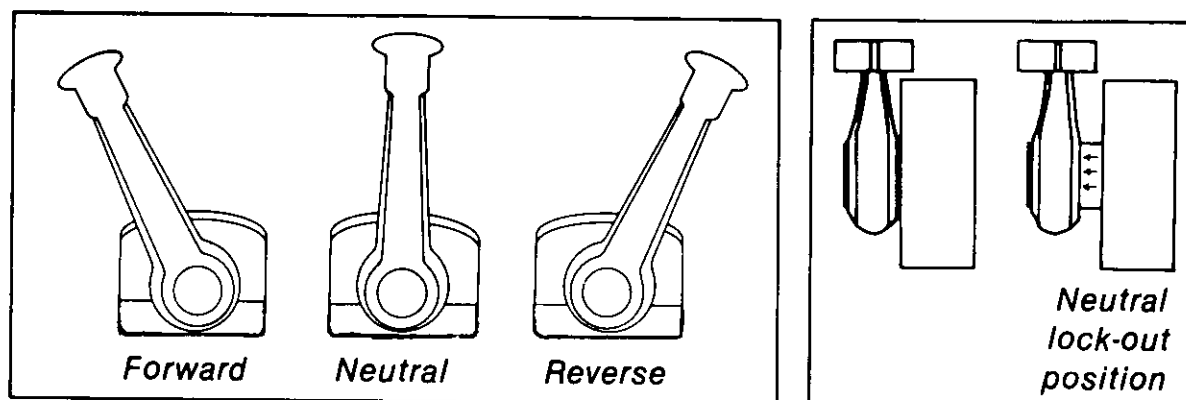
The throttle/shift control, located at the helm station, controls the flow of fuel to the engine and acts as a gear shift lever to control the forward and aft thrust of the propeller.

The vertical position of the throttle control is usually the neutral position. Move the control forward to engage the shifting mechanism, which creates a forward thrust of the propeller. Advance the forward movement to increase the fuel flow to the engine and boost the forward lunge.

Continued...

Move the control lever aft of the neutral position to reverse the shift mechanism and create a reverse thrust of the propeller. Increase the aft movement to increase the reverse thrust. Remember that propellers are designed for maximum forward thrust, so reverse thrust will not be as efficient.

All controls have a safety mechanism. This mechanism will not allow the engine to start when the control is in gear. To increase the flow of fuel to the engine while remaining in the neutral position, you may use the neutral lock out button in the control handle.



As the boat is moving forward, you may reverse the shift mechanism that will provide a "braking action," slowing the boat.



CAUTION

THIS BRAKING ACTION CAUSES A FOLLOWING WAKE WHICH MAY RISE ABOVE THE TRANSOM AND FLOOD THE BOAT IF IT IS MOVING AT TOO GREAT A SPEED. ALLOW ENGINE RPMs TO DECREASE BEFORE SHIFTING INTO REVERSE.

The control head at the helm should be cleaned and kept free of corrosion. Periodic checks should consist of: the mounting for loose screws, the cable conduit for cracks, abrasions, kinked or bent cable, (see your dealer to replace damaged cable); check the cable ends and cable fittings for corrosion, loose brackets, worn or damaged fittings. Replace necessary parts. Cable ends, fittings, and the control mechanism may be sprayed with a moisture displacing lubricant. If your control has "quick disconnect" fittings, inspect the springs for corrosion. If your throttle or shift cables need replacing, reference the data sheet at the front of this manual.

STEERING**MECHANICAL STEERING**

Grady-White boats that use mechanical steering are equipped with No Feedback Mechanical Steering. No feedback steering provides easier steering and increased accuracy by compensating for engine torque.

NOTE

All stern drives are equipped with No Feedback Mechanical Steering. Stern driven autopilots cannot be used with No Feedback Mechanical Steering.

The mechanical steering system is designed to require a minimum of maintenance; however, you should periodically inspect the steering system (especially the control heads, cable ends, and attachments) for wear, rust or corrosion, and lubricate the parts when needed. If you notice a change in the "feel" of the system, such as binding, looseness, noise, or sticking, promptly perform a thorough check.

On outboard models, the push rod at the end of the cable is vulnerable to freezing if improperly greased. When the boat is not in use, the motor should be turned so that the push rod is not exposed to the elements. If you operate in salt water areas, lubrication is extremely important and you should make frequent inspections for corrosion.

HYDRAULIC STEERING

Hydraulic steering systems (not to be confused with power steering) require regular preventative maintenance for continued safe and reliable operation. The oil level in helm pump must be maintained within acceptable operating levels. A low oil level will cause air to be introduced into the steering system and result in unresponsive steering. The oil level should always be within 1/2 inch from the base of the fill hole, located on the front top portion of the helm pump. Check steering system for oil leaks. Unobserved leaks, in time, will result in unresponsive and/or possible loss of steering.

All moving mechanical linkages, sliders, etc. must be greased as needed with a high quality marine grease. Refer to the steering manual for specific recommendations and additional maintenance requirements.

Any slow or sudden change in the "feel" of your steering system indicates an immediate need for a thorough inspection. All repairs and replacements to steering systems should be made only by an authorized dealer.

TILT STEERING

Tilt steering is available, as an optional feature, on certain models in conjunction with hydraulic steering. This feature enables the operator to tilt the wheel up or down. Refer to steering system's Manual for information on oil levels with tilt steering.

CHAPTER FOUR

MAINTENANCE AND SERVICE

4-1

GENERAL

The amount of maintenance required to keep your boat operating properly and to maintain the appearance is dependent on the use of the boat. The use of the boat, include such variables as frequency of use, salt or fresh water, geographic location, etc.

Keep bilge area clean and dry. Leaks found early and corrected will not cause damage. Do not allow grease, grime and dirt to build up.

Any condition found requiring corrective action should be done by a qualified mechanic. If you are away from home, contact your dealer for an authorized repair shop. Repairs should correspond with US Coast Guard specifications.

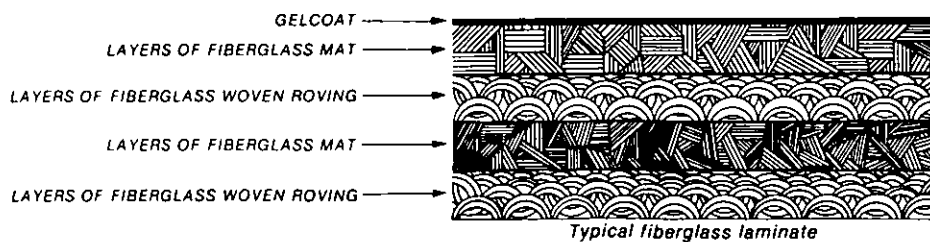
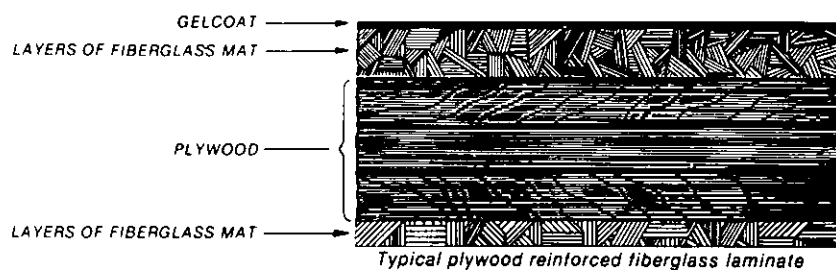
EXTERIOR

Your hull and deck are constructed by the hand lay-up method using the highest quality fiberglass mat and woven roving. This method of construction ensures a proper fiberglass-to-resin ratio and a uniform thickness, which together result in a much stronger boat than those constructed of "chopped glass." This is an expensive process, but ensures that your Grady-White is the strongest, most durable fiberglass boat possible.

Proper maintenance of your boat is not only a source of pride but is the key to maintaining your boat's value. A few simple steps will keep your fiberglass Grady-White looking showroom bright for years.

FIBERGLASS FINISH

The exterior, or gelcoat, of your Grady-White is a thin layer of resin with a finished color pigment. It is used for cosmetic purposes and makes routine maintenance relatively simple. Although gelcoat has a hard smooth surface, it does contain microscopic pores that will allow surface discoloration if not kept clean.



Continued...

MAINTENANCE AND SERVICE

The best way to prevent discoloration is to hose with fresh water after each outing. Clean the boat regularly with a mild household detergent and plenty of fresh water. Use a sponge on smooth surfaces and the deck. A brush can be used on the nonskid areas. Do not use abrasive cleaners. Be sure to rinse away all grime and residue.

At least once a year apply a coat of wax. Check with a local dealer for advice on a suitable wax for that boating region. The wax film will seal the pores as well as enhance the looks of your boat. **DO NOT wax surfaces that may be walked on, as they will become quite slippery.** While waxing your boat, inspect the surface for any damage. Have the damage corrected as soon as possible.

MAINTENANCE

Gelcoat will age or dull naturally. Factors that will affect the rate of yellowing are: the sun, pollution, old wax accumulation and the salt content of the water. The following process will restore a yellowed finish and remove stains:

- Clean the affected area with a good detergent.
- Remove stubborn stains and yellowing with a polishing compound suitable for fiberglass, an electric buffer and an 8 inch lambs' wool pad.



CAUTION

Keep buffer moving. Do not allow it to rest in one spot.
Heat build up will quickly distort the surface.

- Apply the compound sparingly to a small area at a time. During buffing, check to see when the yellow is removed. Avoid excessive buffing; this can wear away gelcoat.
- After removing the discoloration, wipe the area clean and wax.



CAUTION

Compounding too often or excessive compounding
can wear away the gelcoat. Check with your dealer
for the type of compound to use.

REPAIRING

Though gelcoat is a very durable material, it is susceptible to scratches, blistering, and web-like cracks (crazing) over time. It is elastic enough, however, to withstand strong blows while flexing with the hull's movement. Gelcoat problems are cosmetic and will not effect the structural integrity of your boat.

Many gelcoat imperfections such as nicks and scratches can be repaired by obtaining a color match patch kit. This kit can be purchased through your Grady-White dealer. Acetone, the most suitable cleaning agent for gelcoat, can be purchased through your dealer. The patch kit has step by step instructions.

SEE WARNING ON THE NEXT PAGE

**WARNING**

M.E.K. (Methyl ethyl ketone peroxide), gelcoat and acetone are flammable and hazardous chemicals, if not handled properly. Follow instructions on the containers carefully. After the gelcoat is catalyzed, it will soon heat up and put off fumes. When finished with catalyzed chemicals or when they start building up heat, submerge completely in water until cool.

BOTTOM PAINT

If you leave your boat in the water for more than a few days, the hull bottom, below the waterline, should be treated with anti-fouling paint. This paint will help protect the bottom from marine growth and barnacles, which inhibit performance. Since anti-fouling paint slowly dissolves to prevent marine growth, inspection and cleaning of the hull bottom annually is advisable. Repaint whenever necessary. We suggest the use of an epoxy barrier coat, to be applied in conjunction with the anti-fouling paint, to help prevent blistering. For more information see your local dealer.

GRADY DRIVES

Since there is a chance of moisture entering the engine bracket, a drain has been provided. Any moisture entering the bracket should drain to the bottom. The drain plug should be removed periodically to drain the bracket.

The Grady Drive is made of aluminum; therefore, it is very important to use the appropriate type of bottom paint. Consult a bottom paint specialist for advice on the type of paint to use.

CANVAS

Although your Grady-White boat's canvas is made using the highest quality vinyl and latest sewing techniques, your boat's canvas will not be completely leak proof. The seam holes in your canvas may stretch and tend to leak. However, you can correct much of this problem by applying paraffin over the seams.

Please understand that Grady-White does not warrant the fit and design of the canvas to be entirely watertight. For more information on your canvas, refer to the pamphlet provided in your boat package.

MAINTENANCE

To maintain your boat's top and other canvas follow these steps:

- Wash canvas periodically with a heavy-duty detergent and warm water. Do not use petroleum-based or ammonia cleaners on canvas or clear vinyl as they will yellow.

Continued...

MAINTENANCE AND SERVICE

- Lubricate the snap buttons and zippers with petroleum jelly or paraffin.
- Clean clear vinyl thoroughly with denatured alcohol, and then apply a protective layer of clear wax. **Do not** use paste wax as it will turn the vinyl yellow. This process should be repeated as necessary to maintain the protective wax coating.
- Store and secure canvas before trailering.
- Dry all canvas before storing to prevent mildew.
- Remove the top, front, and side panels and roll them up for storage. This procedure is necessary to prevent the front and side vinyl pieces from cracking. **NEVER FOLD THESE PIECES!**

STORAGE

Consider the following steps when putting your folding top canvas option in the stored position:



CAUTION

Secure the folded top when in the stowed position, this will prevent the loss of your canvas.

- Fold the top and zip it into the canvas cover provided.
- Pivot the covered top into the stowed position on the foredeck. The canvas cover is equipped with a strap on each side and an eyelet in each strap. Place the eyelet over the male fasteners located on the port and starboard foredeck.
- Twist the male fasteners 90 degrees to engage.

UPHOLSTERY

Your exterior vinyl upholstery may be cleaned with a mild solution of household detergent and fresh water. Commercial cleaners for vinyl also work well. Follow the instructions provided on the label.

Since the seams of your exterior upholstery are not water proof, your upholstery should be stored in the cabin or covered when not in use.

Most cabin cushions are removable and may be dry cleaned. Some cabin cushions are of a Herculon-type fabric and may be cleaned with upholstery cleaner. **DO NOT MACHINE-WASH THESE FABRICS.**

DURATRIM/POLYETHYLENE/PLEXIGLAS

In the cockpit area of your boat, duratrim and polyethylene are used for trim work. Duratrim has an appearance similar to teak, but requires almost no maintenance. Maintenance of your duratrim should include regular cleaning with soapy water. Apply a surface protector at least twice per year. Polyethylene can be cleaned with products such as 409, or any spray and wipe cleaner. Plexiglas, used to cover your instruments and radio box, can be maintained by use of a glass cleaner and a soft cloth.

SHOWER SUMP

Your shower drains into a contained "sump" which is used to prevent hair, soap, scum and bacteria from accumulating in the bilge and creating odors. We suggest you clean the sump regularly. In the sump pump box, there is a trap which contains a filter. Take the filter out and rinse with water to clean. Then snap filter back in place.

SCUPPERS

All Grady-White boats have self-bailing cockpits, meaning that water on the cockpit floor drains through overboard drains rather than into the bilge. The stern drains (scuppers) have an external scupper flap assembly, which restricts the flow of water back into the boat. Inspect the flaps periodically to make sure that they are free of debris. The scupper flaps will need periodic replacement.

CAULKING

Deck fittings, bow rails, window, hatches, etc., have all been caulked with the highest quality material to ensure a waterproof joint with the boat. However, the working action of normal use will tend to flex the joint and eventually break down the seal between them. Periodically inspect the caulking for leaks. Repair the caulking when necessary or have your dealer do the repair.

HARDWARE MOUNTING

When drilling mounting holes in boat surfaces, make sure each hole is sealed properly. Sealing will prevent water leakage, which is especially important in fiberglass areas that have been reinforced with plywood. A hole sealed improperly allows water inside the fiberglass, which leads to saturation of the plywood reinforcement.

MAINTENANCE AND SERVICE

HARDWARE/HARDTOP FRAME/STAINLESS STEEL RAILS

Your hardware is made of laboratory grade 316 stainless steel, and needs regular cleaning to maintain its "less staining" properties. The key to maintaining your stainless steel is to keep it clean. Use a mild solution of soap and FRESH water to clean your stainless steel regularly. If acid rain is a problem, you should rinse your boat with fresh water after each rainfall. Also rinse your hinges on baitwells and fishboxes. Hinges may need a small amount of penetrating oil to avoid sticking.

MAINTENANCE

- Wash with hot water and soap or a mild detergent or other commercially available stainless steel cleaner.
- After cleaning, rinse with fresh water. Wipe dry with a clean soft cloth to avoid water marks.
- If discoloration or deposits persist, use a non-scratching household cleanser or stainless steel polish with a little water and a soft cloth.
- For stubborn deposits, use a plastic scouring pad or a soft bristle brush with cleaner and water. Rub lightly in the direction of the polishing lines of the finish. Do not use too much pressure, it may mar the surface.



CAUTION

Do not use abrasive cleaning products, pads, steel wool or steel brushes. These will damage the finish.

- Do not allow deposits to remain on the finish for long periods.

NOTE

Do not allow salt solutions, disinfectants, bleaches or other harsh cleaning chemicals to get on these surfaces. If these chemicals come in contact with your stainless steel, wash immediately, rinse and dry with a clean, soft cloth.

FUEL TANK COMPARTMENT

The fuel tank area needs to be rinsed periodically, especially when used in a salt water environment. Dirt that accumulates in this area attracts salt and causes salt crystals to form on your metal fuel tank; salt crystals can eat holes in most metal surfaces. To help prevent your tank from rust and corrosion, rinse the compartment out with FRESH water. Remove access plates from the gastank lid and inspect area for leaks or unsecured lines. If you have a stern drive boat, remove plug in fuel tank compartment to check for leaks and to drain area when flushing with fresh water. Remember to return plug!

The access plates on your gastank lid(s) keep the fuel compartment sealed. Over a period of time, the popping up of these plates cause the o-ring to wear-out. In order to ensure these plates seal properly, the o-ring needs to be replaced periodically.

BATTERY

Regardless of the type of power your boat uses, your battery(ies) are extremely important. They should be secured in a non-metallic tray to avoid electrolyte spills, and battery terminals should be covered by an insulated boot.

Check the fluid level in each battery cell at least once a month. Fill the battery to the upper level with distilled water. **Never** overfill the battery.

Keep terminals clean by scrubbing them with a stiff brush and a mixture of baking soda and water. Afterwards, apply a light coat of grease. Be careful not to let any of the baking soda/water mixture enter the battery.

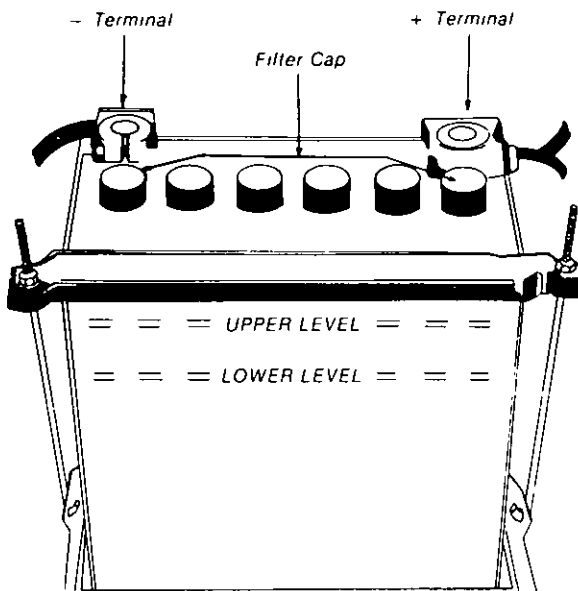
When not in use, check the battery each month by using a battery hydrometer, which measures the specific gravity. The meter should read between 1250 and 1280.



CAUTION

Never disconnect the battery when the engine is running. This can cause damage to the charging system. When replacing your battery, DO NOT replace with a deep cycle type battery due to your engines charging system.

Use ONLY cranking type batteries.



The battery contains sulfuric acid. Avoid contact with skin, eyes or clothing.

Antidote: EXTERNAL - Flush with water. INTERNAL - Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call physician immediately.

Eyes: Flush with water and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes away. Ventilate when charging or using in enclosed space.

Always shield eyes when working near batteries.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Remember, when disconnecting and reconnecting battery cables that the black cable must be connected to the negative terminal, and the red cable must be connected to the positive terminal of the battery. Reversing this procedure will immediately damage your system.



CHAPTER FIVE

WINTERIZATION AND STORAGE

5-1

GENERAL

If your boat is going to be stored for the winter or for an extended period of time, there are some routine operations that should be taken care of. This information is presented as a general guide and the actual storage should be performed by a professional, qualified dealership. Prior to and during the storage process, the boat and it's systems should be checked for any maintenance and repairs. Arrange maintenance and repairs during the storage period.

To avoid costly damage and delay when launching your boat, have it stored and winterized properly. Listed below are some of the general guidelines that should be considered before storage.

BOAT STORAGE

If storing your boat on the trailer, raise and block the trailer axle to prevent tire deterioration. This is an excellent time to lubricate and pack the wheel bearings per manufacturer's instructions.

Make sure the keel, chines, and transom are fully supported. Indoor storage is advantageous in many ways, particularly if your climate produces ice and snow. The storage building should not be sealed airtight, but should be sufficiently ventilated. Ventilation is extremely important both around and through the boat.

To prevent "sweating," a canvas cover should be used for outdoor storage. One way is to have a frame built over the boat to support the canvas. It should be a few inches wider than the boat so the canvas will clear the rails and allow passage of air. The cover should be securely fastened so that winds cannot remove it or cause it to chafe the boat. A poor covering job will cost more than the price of a well-made cover.

CLEANING AND LUBRICATING THE BOAT

Clean and wax your boat before storage. If you store your boat in the water, there may be a layer of growth on the bottom. As it dries, this debris will harden. Clean, scrub, and scrape the bottom promptly when the boat is removed from the water. Thoroughly remove marine growth and other foreign matter from the hull. Clean the inside of all hull openings, thru hull fittings and scupper drains. Inspect the hull bottom for any damage.

Check cleats and rails for corrosion and tightness. Clean all stainless steel as directed under MAINTENANCE AND SERVICE. Use a good quality metal preservative like T-9™ (see page 5-3) on all metal surfaces to prevent salt water damage. Check for loose silicone, hinged, and unseated gaskets. Replace or tighten where necessary. Heavy seas pounding and twisting the hull can cause leaks in your windows, doors and hatches. Check all hinges for corrosion and lubricate.

WINTERIZATION AND STORAGE

DRAINING THE BOAT

Remove the bilge drain plug and open all valves and seacocks to keep the bilge dry. Store your boat with the bow elevated for drainage.

Drain all water tanks, lines, and pumps to prevent freeze damage. The fresh water system may be drained by running any faucet until the tank is empty. When empty, turn the faucet off to prevent pump damage. Residual water will not damage the tank. If desired, the fresh water system may have a non-toxic antifreeze added. This antifreeze can be purchased at marine dealerships or camping dealers.

To drain other lines, close seacocks and run the pumps until the lines are dry. After lines are dry, open the seacocks. In warmer climates, draining will help prevent water stagnation.

The fuel tank compartment should be rinsed with fresh water to keep salt crystals from forming thus causing rust and corrosion to your fuel tank. After rinsing, make sure all water is drained from the compartment.

FUEL SYSTEM

Make sure your fuel does not contain alcohol. Fuels that contain alcohol will absorb humidity. The resulting condensation will separate from the fuel as temperatures drop during winter months, causing corrosion. There are also additives available to inhibit condensation. Keep tanks full, do not overfill, as fuel will leak from the overflow vent, causing damage to your boat.

This is a good time to have your fuel filters changed, if they have not been changed recently.

BATTERIES

Check the electrolyte level in your battery and fully charge the battery before storing. A weak battery loses its charge more rapidly than a strong battery. Ideally, you should disconnect the battery and cover the terminals with grease to prevent corrosion. Store the battery in a cool, dry area on a wood board. Do not store the battery on concrete, because cold, moist surfaces will drain the battery.

ENGINES

Check your engine manual regarding the procedures for winterizing the engine. Follow these important instructions carefully, and your engine should survive the most severe weather conditions. Change all filters. Check hoses and clamps. If you have developed any vibrations during the season, look for loose engines, bent shafts, or bent propellers.

STORAGE CHECKLIST

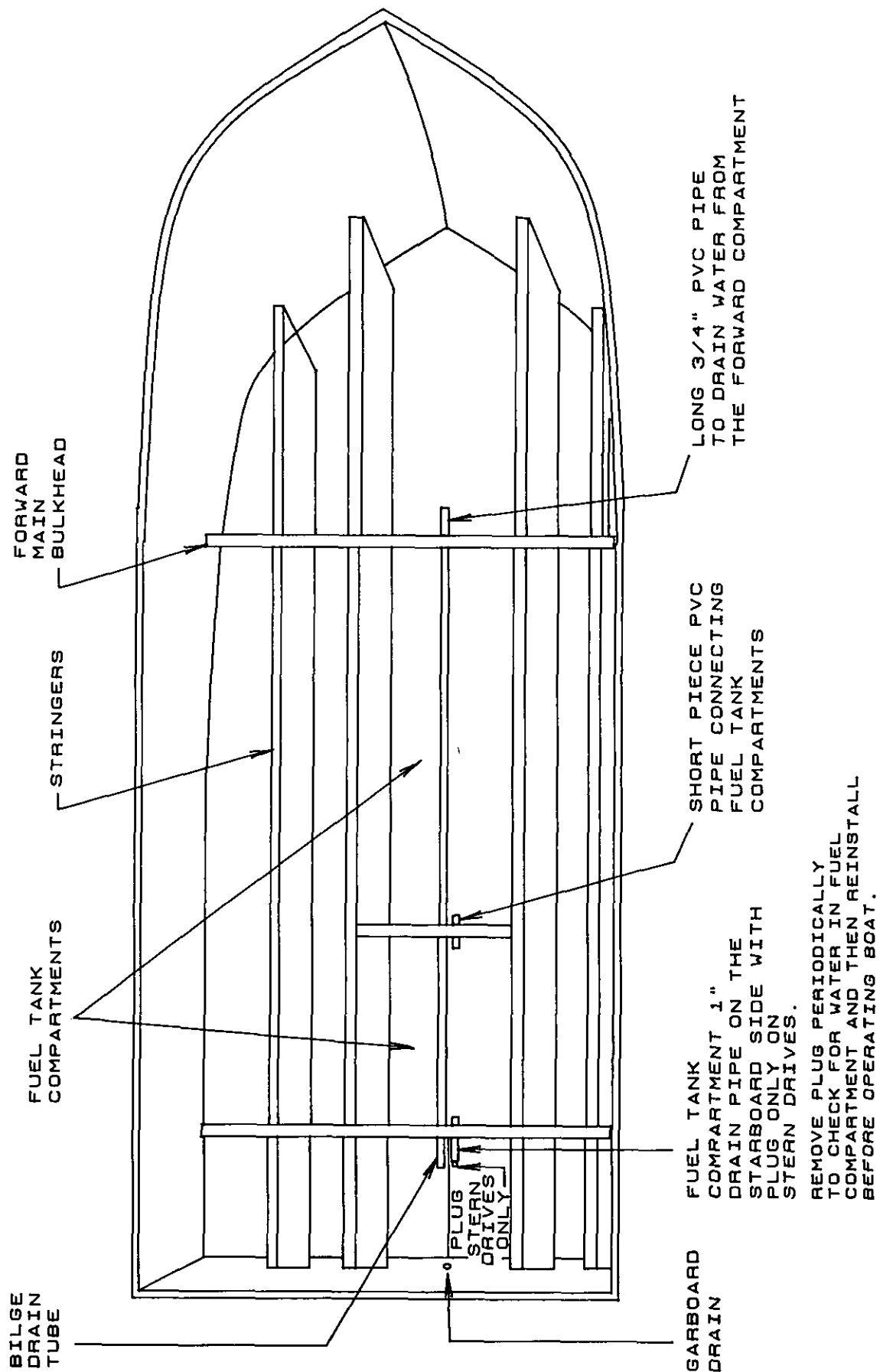
In addition to the previous explanations of winterization guidelines, the following checklist can be used as a guide to the proper storage procedures of your boat. Additional details should be added as needed for your personal inspection.

- Remove all loose and personal effects.
- Remove any detachable and valuable equipment and electronics. Store all electronics inside. Your compass, if built in, should be covered for the winter since ultraviolet rays from the sun will "cloud" the compass and make it difficult to read.
- Winterize all equipment as directed in the manufacturer's manual.
- Store cushions indoors to prevent mildew.
- Drain portable heads. Remember to drain the upper and lower tanks. Water should be removed from deck pumpouts lines.
- Clean the exterior and interior of the boat. Remove all grease, oil, salt spray, etc.
- Remove all garbage. Clean storage compartments, fishboxes, and livewells. Prop fishbox lids open.
- Lubricate hinges, valves, back of fuse and instrument panels, and other surfaces that will rust.
- Check underwater items. Hardware should be in good condition and tight.
- Inspect electrical systems and have any repairs performed.

The T-9™ metal protection product was developed by Boeing Aviation for long-term protection of aircraft. It works by penetrating deeply into fasteners and fixtures, displacing moisture and drying to a clear wax film that lubricates and protects metals for months. T-9 can be used to protect deck hardware, engines, electronics, and fishing tackle.

WINTERIZATION AND STORAGE

TYPICAL BILGE DRAINAGE



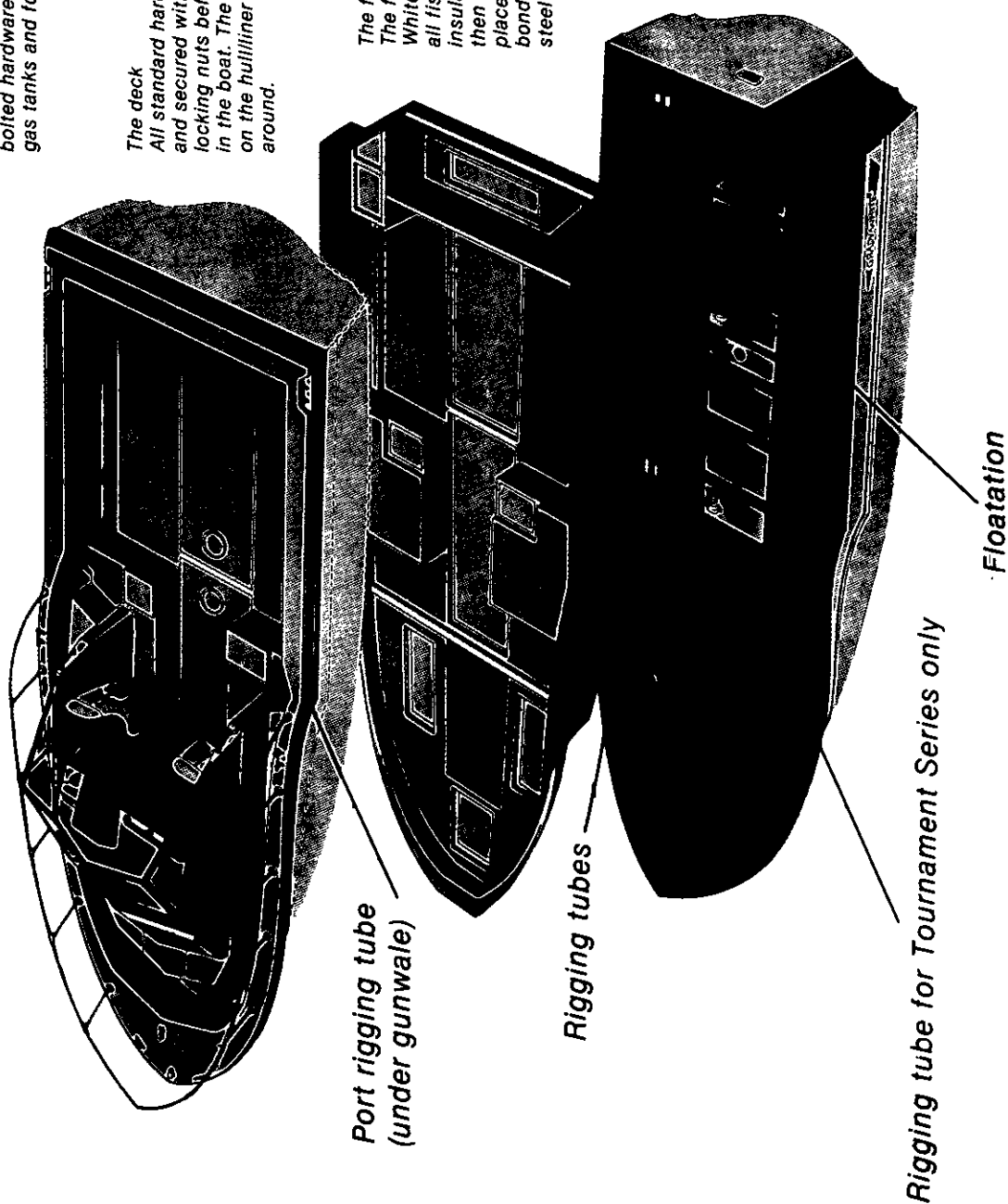
HULL/LINER/DECK LAYOUT

Grady-White Construction
Most Grady-Whites are built in three separate fiberglass pieces, the hull, the deck and the fiberglass liner as shown below. These three pieces are bonded together after installation of standard through-bolted hardware, electrical systems, gas tanks and foam floatation.

The deck
All standard hardware is mounted and secured with through bolts and locking nuts before being installed in the boat. The deck is then placed on the hullliner and secured all around.

The fiberglass liner
The fiberglass liner of your Grady-White is removed from its mold then all fishboxes and ice boxes are insulated with foam. The liner is then placed in the hull, the deck placed over both, and all three are bonded then secured with stainless steel screws all around.

The hull
The wooden stringer system in your Grady-White is encapsulated in resin and fiberglass then fiberglassed into place while the hull is still in its mold. This gives your hull permanent strength and shape. Foam floatation is sprayed into strategic cavities between the stringers to add floatation, strength and sound absorption.



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OPTIONAL FEATURE LIST

ACCESSORIES	226	227	228G
• Auxiliary Fuel Capacity - 56 Gallons	X		X
• Battery Select Switch	X	X	X
• Bow Lifting Ring	X	X	X
• Bow Pulpit	X	X	X
• Cockpit Bolsters	X	X	X
• Cockpit Shower W/10-Gallon Fresh Water Tank	X	X	X
• Compass	X	X	X
• Gunwale Mounted Freshwater System	X	X	X
• Hard Top W/Radio Box & Spreader Lights	X	X	X
• Hard Top Rod Holders	X	X	X
• Head - Portable	X	X	X
• Head - Portable W/In Line Macerator	X	X	X
• Head - W/Deck Pump Out	X	X	X
• Hydraulic Trim Tabs	X	X	X
• Livewell - Aerated	X	X	X
• Livewell - Raw Water	X	X	X
• Outrigger Kit 15 Ft. (Gunwale Mount)	X	X	X
• Outrigger Kit 15 Ft. (Hardtop Mount)	X	X	X
• Seating - Deluxe Helm & Companion Chairs	X	X	X
• Steering - Hydraulic	X		std
• Steering - Hydraulic Tilt	X		X
• Stereo/Cassette System	X	X	X
• Swim Platform W/Ladder	X	X	X
• Swim Platform W/Ladder (Full Width)		X	X
• Washdown - Pressurized Sea Water W/Hose	X	X	X
• Windshield Wiper (Port)	X	X	X
• Yamaha/OMC/Merc Binnacle Control	X		X
CANVAS	226	227	228G
• Covers For Pedestal Chairs	X	X	X
• Drop Curtain	X	X	X
• Hardtop Curtains	X	X	X
• Helm Station Cover	X	X	X
• Mooring Cover	X	X	X
• Vista Top W/Curtains And Boot	X	X	X
•			

OPERATION OF STANDARD FEATURES

INSTRUMENTATION AND SWITCHES

Grady White installs full instrumentation on pre-rig and stern drive boats. The instruments are electrically connected to the ignition key and will operate when the ignition switch is in the "on" position.

INSTRUMENT PANEL

Not all boats are equipped with the same type of instrumentation. Consult your dealer for specific information on the type of instrumentation included on your boat.

ENGINE WATER TEMPERATURE GAUGE

The water temperature gauge indicates the temperature of the cooling water circulating through your engine. When the temperature exceeds the recommended operating range for your engine, immediately shut off your engine to prevent damage. Overheating is often caused by obstruction of your engine's water intake on the lower unit. Check the water intake first if you experience trouble.

FUEL GAUGE

The fuel gauge indicates the fuel level. When reading this gauge, remember two things:

- The accuracy of your gauge varies with the attitude of your boat in the water (trim or list).
- The fuel pickup tube inside the gas tank is not capable of withdrawing all of the fuel from the tank.

For these reasons, never operate your boat at very low fuel levels.

OIL LEVEL GAUGE

This gauge indicates the quantity of oil in the oil tank.

OIL PRESSURE GAUGE

The oil pressure gauge indicates the oil pressure at the engine. Consult your engine manual for proper operating ranges.

TACHOMETER GAUGE

The tachometer indicates engine revolutions per minute (RPMs). Consult the engine manual for recommended operating RPMs.

TRIM GAUGE

The trim gauge indicates the angle of thrust of the lower unit of the engine. See TRIM, page 3-3, for adjustment advice.

VOLTMETER

The voltmeter indicates the battery charge. A reading of 12 or 13 volts is normal, denoting a fully-charged battery. Readings below 11 imply a weak battery, and may cause the engine(s) to fail. A reading of 13-15 volts while engine is running is normal. Readings over 15 volts may indicate regulator problems. Low or fluctuating readings may imply loose connections (belts) or trouble in the regulator and alternator circuit. A voltage drop soon after the engine is shut down indicates a bad battery or a heavy load on the electrical system.

WATER PRESSURE GAUGE

The water pressure gauge indicates the water pressure in the engine cooling system. Readings help determine if water pressure is too low for adequate cooling.

WATER TEMPERATURE, OIL LEVEL, AND FUEL SYSTEM WARNING BUZZER

Outboard models may have a warning buzzer. The buzzer is located in the throttle control or under the dash. Consult your engine manual for exact location and functions.

SWITCH PANEL

At the helm station you will find an accessory switch panel. Not all boats are equipped with the same accessories. Consult your dealer for information or questions regarding the accessories included on your boat.

BILGE PUMP

This two-way switch serves as an overriding manual switch in the event of failure of the automatic switch in the bilge.

BLOWER

The blower eliminates any gasoline fumes from the engine compartment on stern drive models. The blower should run at least four minutes before starting the engine and should be in operation when running slower than cruising speed.

COCKPIT LIGHTS

The cockpit lights provide illumination in the cockpit area.

FUEL

Dual tanks have a three-position switch (MAIN-OFF-AUX) which gives separate readings for each tank. However, this switch only reads levels of fuel, **it does not convert tanks**. Reference FUEL SELECT VALVE, page 2-2, for converting tanks.

HORN

The horn meets the requirements of the USCG sounding device.

LIVEWELL

This switch activates the optional livewell system.

NAVIGATIONAL/ANCHOR LIGHTS

The three position switch (NAV-OFF-ANC) changes the lighting configurations to running or anchor lights.

TRIM/TILT

The trim/tilt switch is located on the throttle control. Some stern drive models, however, may have a separate tilt switch on the dash. Trim changes the angle of thrust of the engine (reference TRIM). Tilt raises the drive unit for trailering.

TRIM TAB

Trim tab switches are used for adjusting the attitude of the boat. See TRIM TABS for more details .

WASHDOWN

This switch activates the optional washdown system.

WATER PRESSURE

This switch activates the pressurized fresh water system.

WINDSHIELD WIPER(S)

This switch powers the windshield wiper(s).

ACCESSORY

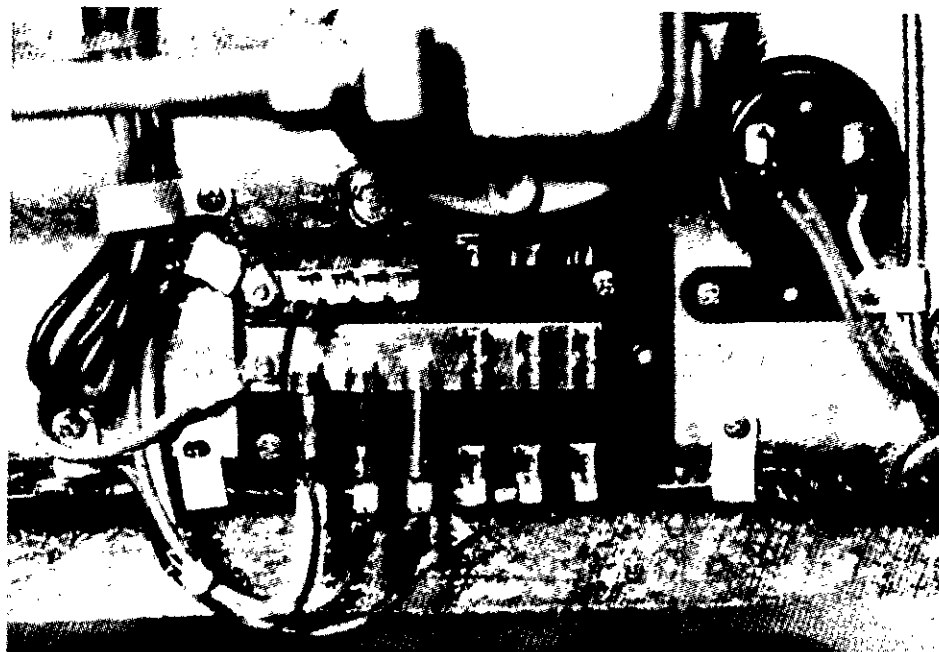
Switches and breakers labeled "ACC" are blank. Both are used for non-factory installed accessories. See ACCESSORY WIRING COLOR CODE AND FUSE/BREAKER SIZE CHART, for recommended breaker amperages. Switch labels are available from your dealer for non-factory installed options.

NOTE

Use an anti-corrosion spray on the back of panels and on exposed wires to prevent the rust or corrosion that could lead to an electrical system failure.

AUXILIARY FUSE PANEL

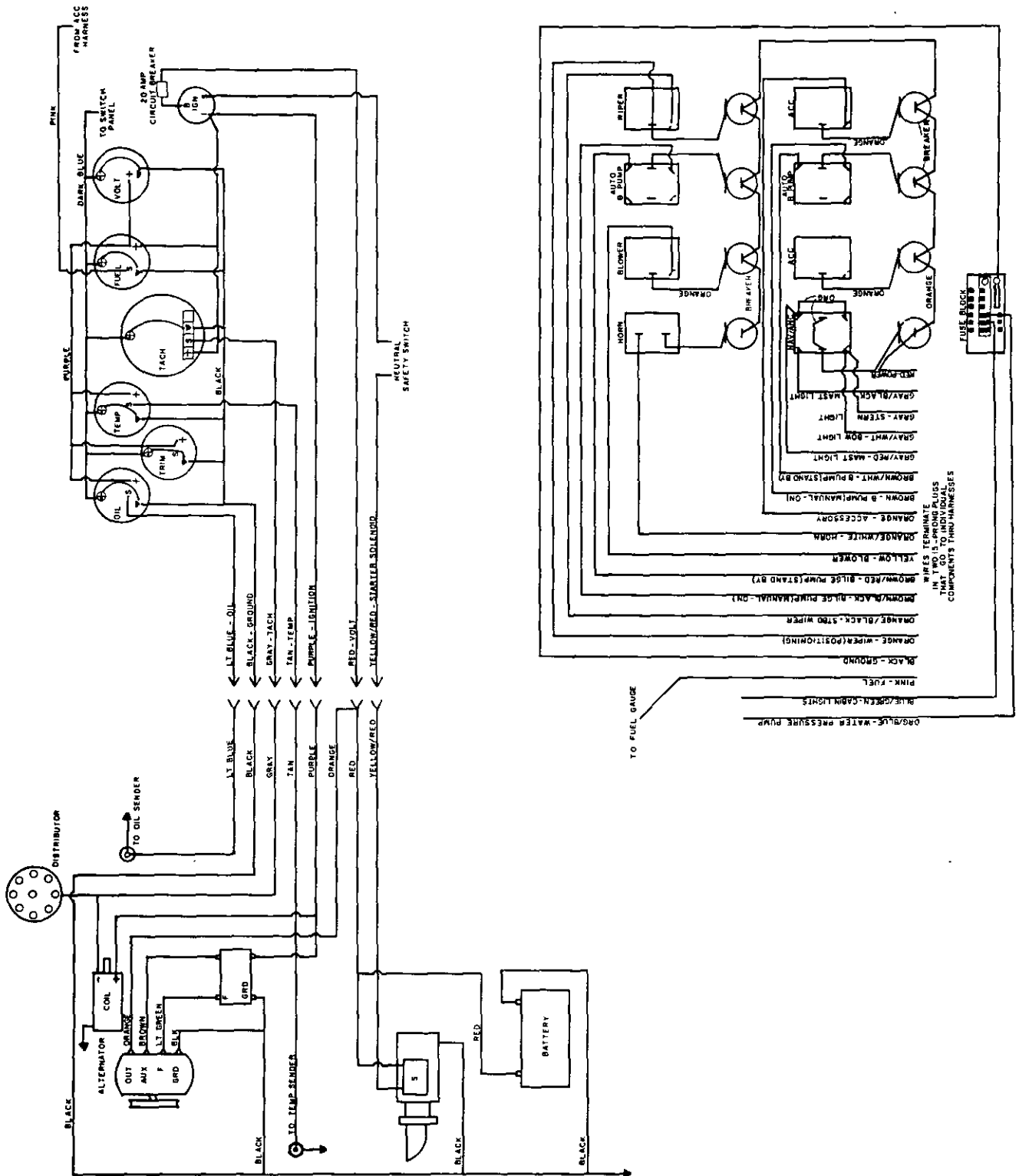
The auxiliary fuse panel, located under the dash, offers the ability to install electronics in addition to the accessory switches located in the dash. Your model utilizes the glass type fuses.



ACCESSORY WIRING COLOR CODE AND FUSE/BREAKER SIZE CHART

ACCESSORY	WIRE SIZE AND COLOR	AMPERAGE	LOCATION
LIGHTS			
BOW LIGHT	16 GA. GRAY	15.0	ACCESSORY PANEL
AFT POLE LIGHT	16 GA GRAY/WHITE	15.0	ACCESSORY PANEL
MAST LIGHT (FORWARD BULB)	16 GA GRAY RED	15.0	ACCESSORY PANEL
MAST LIGHT (AFT BULB)	16 GA GRAY/BLACK	15.0	ACCESSORY PANEL
PANEL LIGHTS	16 GA DARK BLUE	15.0	ACCESSORY PANEL
CABIN LIGHTS	16 GA DARK BLUE/GREEN	10.0	FUSE BLOCK
COCKPIT LIGHTS	16 GA DARK BLUE	10.0	ACCESSORY PANEL
SPREADER LIGHTS	16 GA DARK BLUE/WHITE	10.0	ACCESSORY PANEL
PUMPS			
BILGE PUMP (FORWARD) :			
RULE 1100	16 GA BROWN/BLACK	5.0	ACCESSORY PANEL
RULE 1500	16 GA BROWN/BLACK	7.5	ACCESSORY PANEL
AUTO FLOAT SWITCH (FORWARD)	16 GA BROWN/RED IN LINE	5.0	NEAR BATTERY
BILGE PUMP (AFT) :			
RULE 1100	16 GA BROWN	5.0	ACCESSORY PANEL
RULE 1500	16 GA BROWN	7.5	ACCESSORY PANEL
AUTO FLOAT SWITCH (AFT)	16 GA BROWN/WHITE IN LINE	5.0	NEAR BATTERY
AERATOR PUMP			
	16 GA ORANGE/2BROWN	2.0	ACCESSORY PANEL
SHOWER SUMP PUMP (FLOAT SWITCH)	16 GA BROWN/ORANGE	4.0	FUSE BLOCK
WATER PRESSURE PUMP (CABIN SHOWER)	12 GA ORANGE/RED	15.0	ACCESSORY PANEL
WATER PRESSURE PUMP	16 GA ORANGE/BLUE	5.0	FUSE BLOCK
WASHDOWN PUMP	12 GA ORANGE/BROWN	15.0	ACCESSORY PANEL
LIVWELL PUMP	16 GA ORANGE/BROWN	5.0	ACCESSORY PANEL
IN-LINE MACERATOR PUMP	12 GA ORANGE/GRAY	20.0	ACCESSORY PANEL
PRIMER PUMPS (PORT)	16 GA PINK/RED	5.0	ACCESSORY PANEL
(STARBOARD)	16 GA PINK/BLUE	5.0	ACCESSORY PANEL
MISCELLANEOUS			
BILGE BLOWER	16 GA YELLOW	10.0	ACCESSORY PANEL
HORN	12 GA ORANGE/WHITE	15.0	ACCESSORY PANEL
WINDSHIELD WIPER (ACTUATOR) :			
PORT	16 GA ORANGE/GREEN	5.0	ACCESSORY PANEL
STARBOARD	16 GA ORANGE/BLACK	5.0	ACCESSORY PANEL
WINDSHIELD WIPER (POSITION)	16 GA ORANGE		
WINDLASS SOLENOIDS	14 GA ORANGE/PURPLE	*	
	14 GA ORANGE/YELLOW	*	
WINDLASS POWER LEAD	4 GA RED	*	
	4 GA BLACK	*	
ACCESSORY	16 GA ORANGE	10.0	ACCESSORY PANEL
ACCESSORY GROUNDS (IND)	16 GA BLACK	N/A	
ACCESSORY GROUNDS MAINS	10 GA BLACK	N/A	
HYDRAULIC TRIM TABS	16 GA HARNESS (SUPPLIED)	20.0	FUSE BLOCK
MAIN FUEL TANK (SENDER)	16 GA PINK	N/A	ACCESSORY PANEL
AUXILIARY FUEL TANK (SENDER)	16 GA PINK/WHITE	N/A	ACCESSORY PANEL
ACCESSORY PANEL POWER LEAD	10 GA RED CIRCUIT BREAKER	40.0	NEAR BATTERY
VHF (HARDTOP RADIO BOX) POWER LEAD	10 GA RED/WHITE IN LINE	20.0	NEAR BATTERY
VHF GROUND	10 GA BLACK/WHITE	N/A	

TYPICAL STERN DRIVE INSTRUMENT AND SWITCH PANEL WIRING



MAIN CIRCUIT BREAKER

There is a 40 AMP circuit breaker located in the aft starboard storage area. This is the main breaker protecting the wiring supplying power to the accessory switch panel. If this breaker is tripped, it may be reset by depressing the red button on the breaker box.

FLOAT SWITCHES

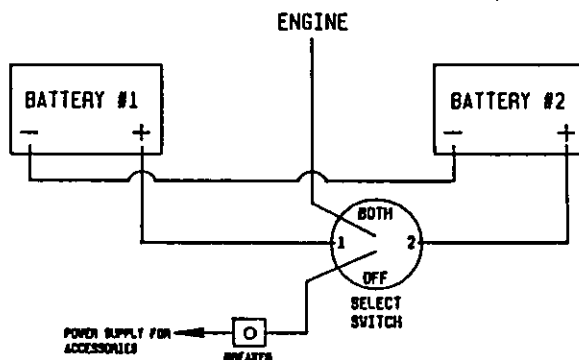
Your boat is equipped with two bilge pumps, each containing an automatic float switch. This will enable the bilge pump to come on automatically if a significant amount of water accumulates in the bilge.

These switches are wired directly to the batteries. They function independently of the optional battery select switch and can activate the bilge pump with the battery select switch in the "off" position.

OPERATION OF OPTIONAL FEATURES

BATTERY SELECT SWITCH

Boats that are equipped with two batteries use a select switch to indicate which battery will be used. The select switch is labeled: Battery 1, Battery 2, BOTH, and OFF.



In an emergency situation, when neither battery will start the engine, the select switch allows you to combine the power of both batteries, by selecting BOTH. The switch must be returned to either the #1 or #2 position after the engine is started to allow each battery to be charged.



WARNING

Never turn the battery select switch to the "OFF" position with the engine running, or the charging system could be damaged.

COCKPIT SHOWER

To operate the cockpit shower, the water pressure switch located on the accessory panel, must be in the "on" position. Open the flap and pull the shower wand out from the recessed deck fitting. Depress the button on the back of the wand to spray water. To reinstall the shower wand, gently feed the hose down through the deck and replace the flap onto the fitting.

GUNWALE MOUNT FRESH WATER

To operate the gunwale mount fresh water system, the water pressure switch, located on the accessory panel must be in the "on" position. Swing the faucet out from the recess to an accessible position. The water flow is controlled by the small white knob at one end of the recess. The faucet should be stored in the recess, when not in use, to prevent damage.

WASHDOWN OPERATION

To operate the washdown, first open the seacock, located on starboard side of the aft bilge. Depress the washdown switch, on the accessory switch panel at the helm. The washdown system will now be pressurized at the washdown faucet outlet. This faucet may be used alone or with a washdown hose. A washdown hose, with a spray nozzle attached, may be used intermittently without turning the switch "off," basically the same as a home yard hose with a nozzle. The washdown pump has an internal pressurization switch which will maintain water pressure as needed until the switch is turned "off" at the helm.

RAW WATER LIVEWELL

To operate the raw water livewell, first open the seacock on the port side of the aft bilge. Then plug the drain in the bottom of the livewell box. The switch at the helm needs to be in the "on" position. The livewell will then fill with water through an inlet fitting, near the bottom of the box. The water level will rise to a point slightly below the top of the livewell and will drain overboard through a screen overflow fitting.

NOTE

If the seacock is left open and the pump is not "on," the boat's forward motion through the water will gradually fill the box. This inadvertent filling may be prevented by closing the seacock when the livewell option is not in use.

AERATED LIVEWELL

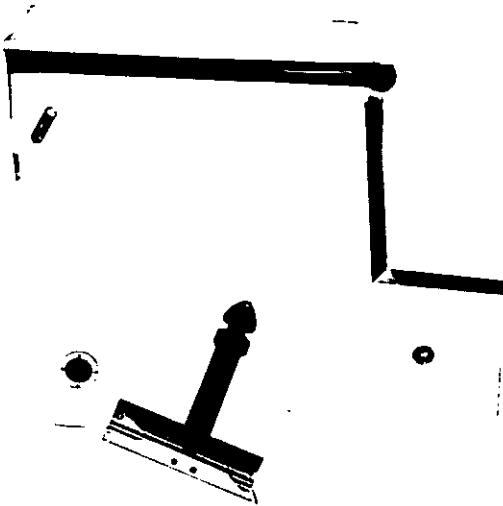
Before operating the aerated livewell, plug the drain in the bottom of the livewell box. Fill the livewell with water, using a bucket or the optional washdown hose. Turn the switch on at the helm, designated for the aerated livewell. The aeration process will now begin by the following method:

- When your boat is equipped with a sprayer type livewell, you will find a pump mounted inside the box. This pump will recirculate the water through a sprayer type fitting. The flow rate of water through the sprayer can be adjusted by a valve built into the top of the fitting.

To evacuate water from the livewell box, turn the system "off" at the panel and remove the drain plug.

TRIM TABS

Trim tabs are electrically-hydraulically operated and are used to regulate the attitude of the boat while moving. They may also be used to adjust the boat's running angle in adverse seas or to compensate for unusual load conditions.



TRIM TAB



TRIM TAB SWITCH

The trim tabs are operated by a two rocker switch panel and will aid in trimming the boat fore and aft for a smoother ride. The switches are marked "bow down". Trim tabs in the extreme "bow up" positions will have no effect on the boat's ride.

Continued...

Trim tabs can improve the ride of your boat by adjusting where the water is hitting the keel line. In a slight chop, the waves may be hitting the keel of your boat around the helm area, causing an uncomfortable ride. By adjusting the trim tabs and lowering the bow, the waves will hit the keel at a more forward point, softening the ride. Experimenting with trim tabs in various sea conditions will help you determine the best positions for your boat under different load conditions.

Trim tabs are also useful in correcting a port or starboard list. If the boat is listing to the port side, press the starboard trim tab switch toward "bow down". Press the port trim tab switch toward "bow down" to correct a starboard list. This will tend to lower the bow by pulling the higher side to a level position. If your bow is already in a low position, you may correct list by pressing the trim tab switch toward "bow up." This will cause the low side to rise and level the boat. The running angle will also gradually improve.

Trim tabs in the extreme "bow down" position will cause the boat to come on plane with minimum bow rise. Unless you are operating at low speeds or with considerable cockpit weight, you will likely want to raise the tabs slightly when underway in order to avoid "plowing" water. With the tabs in the "bow down" position, you will be able to maintain a plane at the least possible RPMs.

NOTE

Most drive units are equipped with an adjustable rudder trim tab. This trim tab should be adjusted to balance the steering at the speed which you travel most frequently. Variations in speed, boat load, or changes in the drive unit trim will cause the steering to pull in one direction. If the boat pulls to the left, adjust the trim tab to the left and vice-versa.

TRIM TAB PUMP LOCATION

The trim tab pump is located in the starboard berth storage compartment, inside the cabin.

OUTRIGGERS

Outriggers are an optional feature which allow you to spread the lines trolled from your boat and decrease the chance of entanglement.

ADVANTAGES

Advantages of outriggers include: offering bait throughout a larger area behind the boat, placing bait out of the wake zone, automatic drop back following strikes (which allows for fish to completely accept bait), and a reduction in unnecessary twisting action characteristic of artificial bait.

INSTRUCTIONS

For proper installation and use, reference the instruction sheet include in your boating package.

Continued...

CARE AND MAINTENANCE

Outriggers should be washed with fresh water, a mild soap and a soft cloth. The outrigger holders are easy to reach, unlike the poles which should at least be sprayed down with fresh water. Never use acidic or abrasive cleaners to clean your outriggers.

A periodic waxing of your outriggers is suggested if your boat is frequently exposed to salt water. The wax will provide a protective coating and seal the pores of the metal. A non-abrasive, high quality marine or automotive wax is recommended. Before storage, clean and wax your outriggers.

During assembly, grease all threads, bolts and tubes, where one section is inserted into another. Annually, disassemble and regrease all applicable surfaces.

A periodic check for stretched or worn spreader wires on the outrigger poles is advised. If wires are stretched, they should be re-tensioned to provide even support.

HEAD OPERATING INSTRUCTIONS**PORTABLE HEAD WITH IN-LINE MACERATOR****OPERATION**

- Compress the bellows pump, located on the left corner of the toilet, a few times to add water to the bowl.
- Flush the toilet by pulling the slide valve handle out (located on the front of the toilet).
- Compress the bellows pump until the bowl is rinsed.
- Close the slide valve handle by pushing it in fully.

EMPTYING RESERVOIR BY USE OF OVERBOARD DISCHARGE

- Place the Y-valve in the overboard discharge position, located on the aft wall, inside of the console.
- Open the overboard seacock, located the same as the Y-valve.
- Turn "on" the head pump switch at the helm and discharge until the reservoir is empty. Close the overboard seacock.

EMPTYING RESERVOIR THROUGH DECK PUMP-OUT

- Place the Y-valve in the deck pump-out position, located on the aft wall, inside the console.
- Remove the cap from the deck pump-out, located on the starboard gunwale. Connect the vacuum hose and run until the tank is empty.
- Replace the cap on the deck pump-out.

PORTABLE HEAD WITH DECK PUMP-OUT**OPERATION**

- Compress the bellows pump, located on the left corner of the toilet, several times to add water to the bowl.
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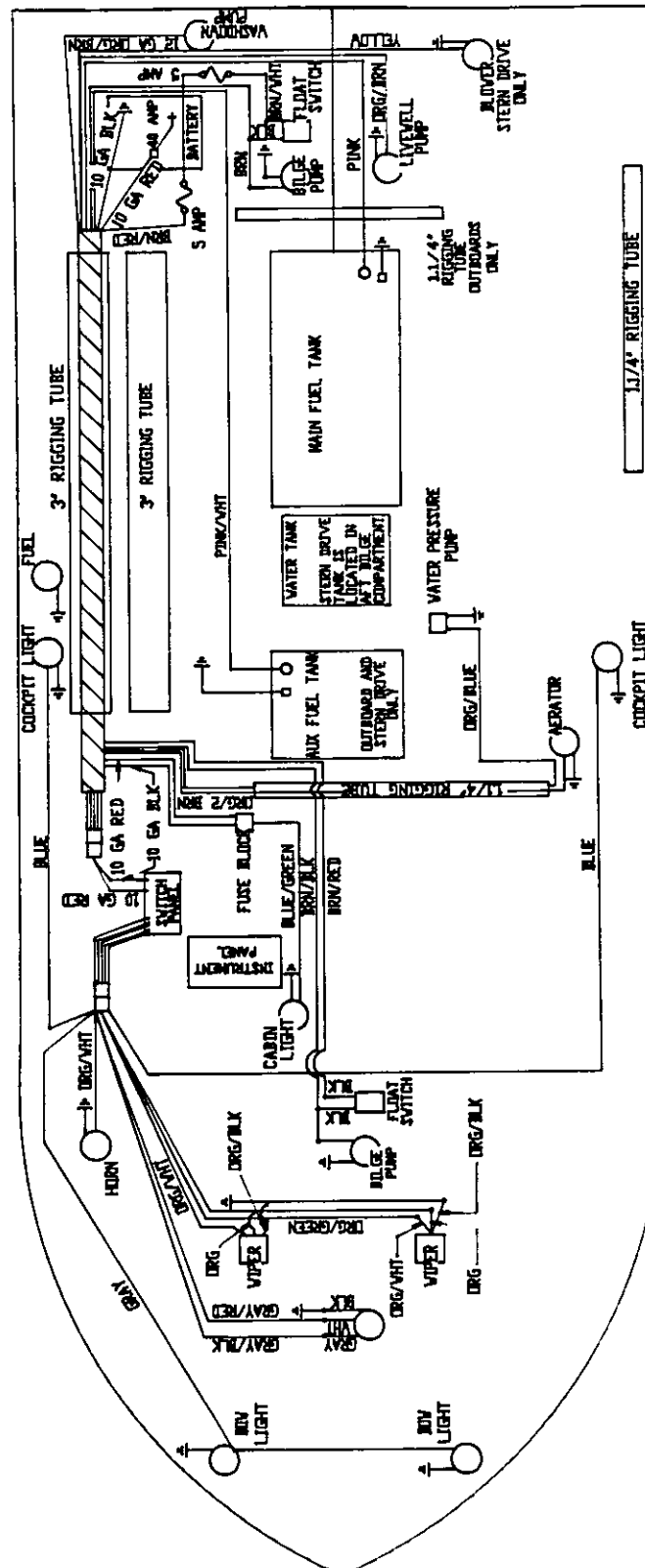
EMPTYING RESERVOIR THROUGH DECK PUMP-OUT

- Remove the cap from the deck pump-out, located on the starboard gunwale.
- Connect the vacuum hose and run until the tank is empty.
- Replace the cap on the deck pump-out.

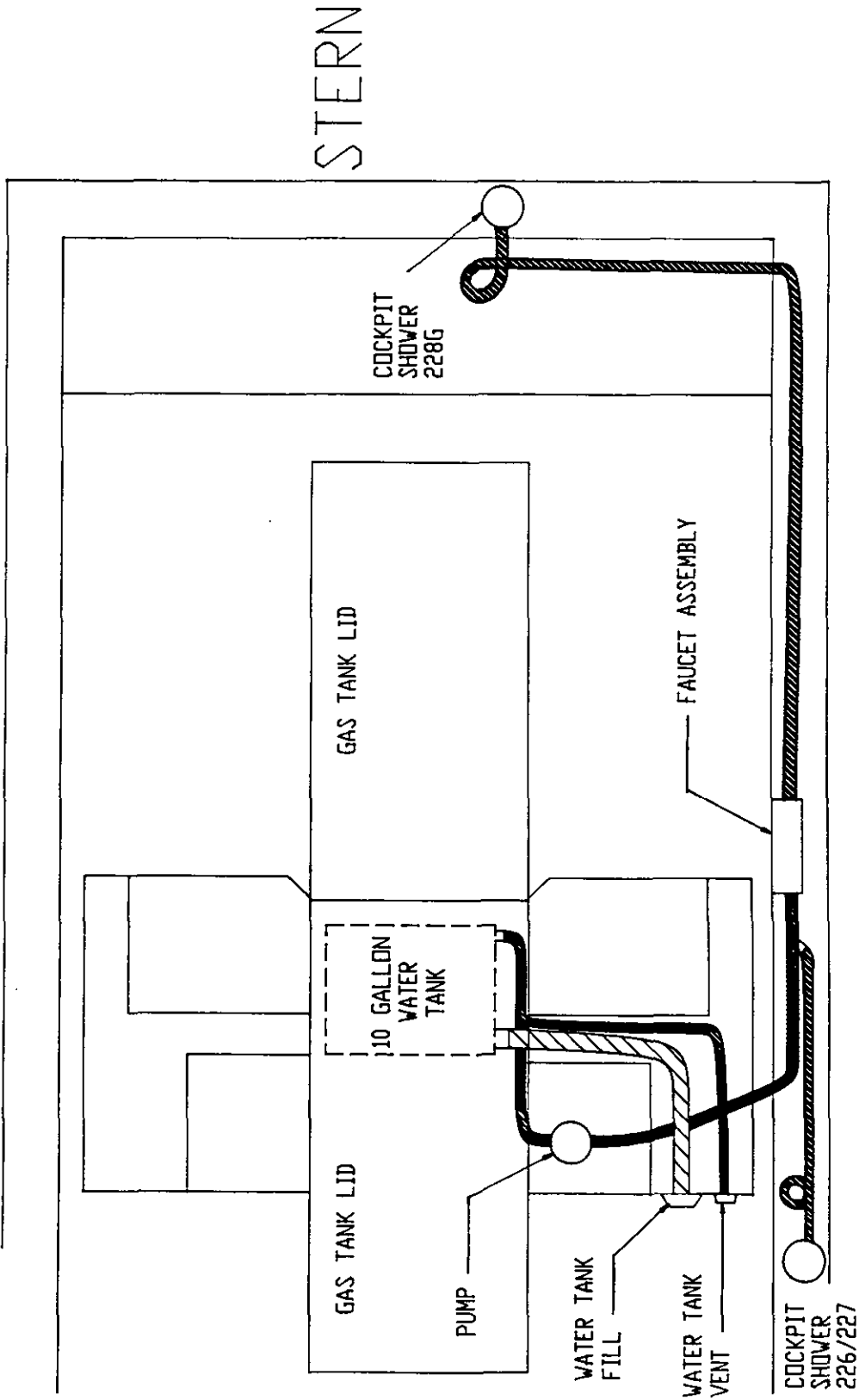
**CAUTION**

Overboard discharge seacock must be sealed
and secured in the closed position
within the three mile limit.

ACCESSORY WIRING



FRESH WATER SYSTEM



WASHDOWN/LIVEWELL SYSTEM

