



Owners Manual

2004

33 Walk



SPECIFICATIONS

L.O.A.	33'8" (10.26m)
BEAM	11'0" (3.35m)
DRAFT – HULL	25" (0.64m)
DEADRISE	198
FUEL CAPACITY	270 GAL (1022L)
WEIGHT – HULL (6)	12,000 LBS (5443kg)
WEIGHT – TRAILER (6)	15,460 LBS (7058kg)
COCKPIT DEPTH	26" (0.66m)
COCKPIT AREA	75 SQ FT (22.86m)
MAX. HP	500 (372.85kw)
FRESH WATER CAPACITY	39 GAL (147.63L)
FISHBOX (2) CAPACITY	50 GAL (189.3L)
BAITWELL CAPACITY	50 GAL (189.3L)
BRIDGE CLEARANCE	96" (2.43m)
W/TOP	127" (3.22m)

PUMP WIRE COLORS

Pump	Wire Color
Baitwell	Brown / Green
Bilge - Automatic	Brown / Red
Bilge – Manual	Brown
Electric Head Supply	Brown / Yellow
Fish Box Macerator	Brown / Pink
Head Macerator	Brown / White
Potable Water	Brown / Blue
Sump	Brown / Orange
Washdown	Brown / Black

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Introduction

Congratulations! You are now the proud owner of a new Pro-Line 33 Walkaround Fishing boat. Welcome into the proud family of satisfied Pro-Line owners. Every expedition lets you enjoy the outstanding features designed into every boat we construct. Your new Pro-Line is more than just a boat; it's a lifestyle. Pro-Line's commitment to the needs and wishes of the professional sport fisherman has resulted in a superior fishing craft, providing you with comfort, performance, security and fish-ability. All of our boats comply with U.S. Coast Guard (USCG) safety regulations, and are designed, and crafted in accordance with the National Marine Manufacturers Association (NMMA), American Boat and Yacht Council (ABYC) standards, and the optional Common European directive (CE),

This manual (to be kept onboard your Pro-Line) is designed to provide you with information necessary for safe, efficient operation and care of your new vessel. To maximize your enjoyment and safety, take the time now to carefully review the documentation in your owner's pack and this manual, and really get to know your boat.

Dealer's Duties

- Your dealer's responsibilities include but are not limited to:
- Pre-delivery verification of proper rigging and operation.
- Providing adequate orientation in general operation of your Proline including explanation of specific safety considerations regarding the use of systems and components.
- An explanation of owner's packet literature and warranty registration cards for all separately warranted equipment and accessories.
- Explaining local and out of area service procedures during and out of warranty periods.

Customer Responsibilities

Be proficient in boat handling and safety. - **THIS MANUAL IS NOT INTENDED TO PROVIDE COMPLETE TRAINING ON ALL ASPECTS OF GENERAL BOAT OPERATION.**

- Read and understand the limited warranty.
- Read all literature and instructions and use and maintain all equipment as directed.
- Examine the boat at time of delivery to ensure that all systems are functioning normally.
- Learn about and operate boat in accordance with local, state and federal laws, regulations and registration forms.
- The owner is legally responsible for all liabilities of operation – secure **insurance protection.**

Safety

Your Pro-Line boat has been constructed with safety in mind, however the ultimate safety of you and your passengers is in your hands. Plan your trips carefully. Insure ample fuel supply and reserve. Tell someone where you are going and when you expect to return. Keep current charts onboard. Read and observe USCG boating safety circulars.

Regulations

The USCG is the authority of all the waterways. State local authorities enforce boating regulations. You are subject to marine traffic laws and "Rules of the Road" on federal and state waterways, and must submit to boarding if requested by proper authority. There are many publications available from the Coast Guard concerning regulations and more. For additional information call the boating safety hot line at 1(800) 368-5647.

Equipment

USCG regulations require the following equipment while operating your boat:

- Fire extinguisher
- Personal Flotation Device (PFD) for each occupant
- One throw-able PFD
- Sound signal device
- Navigational lights if operated at night
- Sight signal (flare- night, orange flag- day) when in coastal waters or Great Lakes.
- Anchor and sufficient line

In addition, here is a list of suggested equipment you should have aboard your Pro-Line:

- First aid kit and blankets
- Mooring lines and fenders
- Combination oar / boat hook
- Spare prop, nut & washer
- Spare fuses and bulbs
- Local charts and compass
- 2 way radio (with proper license)
- Floating key chain & spare keys
- Emergency food and water
- Sea anchor with line
- Bailing device
- Tool kit and lubricant
- Spare fasteners, hose clamps, plugs
- Binoculars or telescope
- Water proof flashlight
- EPIRB (emergency beacon)
- Navigation device
- Waterproof matches or lighter

Passenger Safety

You are responsible for the safety and conduct of your passengers, make sure that:

- You instruct passengers on proper use and location of PFD's. Children and non-swimmers should wear one at all times.
- When underway each passenger is in a safe location, and knows to keep the boat balanced.
- At least one other person knows how to operate the boat in case of emergency.
- They are aware of dangers of the prop, and the possibility of sudden maneuvers and jolts.
- To turn the engine off and remove key when swimmers are near the propellers or when using the dive platform.
- All keep away from lines under stress should they break and recoil.

Rules of the Road

Know and use the rules of the road, the information here is only a brief overview. For detailed information contacts the USCG.

Audible warning signals:

- One short horn blast: starboard course change.
- Two short horn blasts: port course change.
- Three short horn blasts: astern operation.
- Five horn blasts: doubt about previous signal, or danger.
- One Five second blast every minute: for fog operation

When overtaking give-way vessel announces intention with horn blast(s) and waits for same response then completes maneuver. When approaching head-on, both boats give way after giving appropriate horn blast (Preferably starboard). When crossing, a vessel converging from the starboard has right of way, the port vessel gives way (both acknowledge with one short horn blast). Know and observe navigational buoys and markers. Give way to craft under sail.

Hazardous Conditions

Keep track of weather developments and avoid hazardous conditions, When forced to operate your Proline in storm conditions:

- Wear PFD's
- Stow loose gear and equipment.
- Place heavy items as low as possible.
- Head for the easiest to reach safe location.
- Reduce speed. If the boat leaves the water, you're moving too fast.
- If power fails, rig a sea anchor off the bow (an empty ice chest in a pinch).
- Stay with boat if it capsizes, unless it is burning out of control.

Alcohol

Don't drink and drive. If you have been drinking have someone drive who has not been drinking. Never operate a boat under the influence of drugs or alcohol.

Carbon Monoxide

Be aware of and avoid conditions that can cause carbon monoxide poisoning (see USCG boating safety circular 77). Sources of carbon monoxide include any gas or diesel engine, any flame such as a charcoal grill, stove or heater. Carbon monoxide can accumulate to deadly levels in enclosed spaces. Always ventilate occupied areas of vessel with fresh clean air.

Fire

Be aware of and avoid conditions that lead to accidental fire. Guard against and watch for fuel spills and leaks. Inspect wiring for damage or exposure that could lead to short circuits or arcing. Make sure those who smoke are vigilant. Smoking is an ignition source that can start a fire. Don't allow smoking while fueling. Keep an USCG approved fire extinguisher aboard at all times. Inspect the fire extinguisher regularly. Learn how to properly use it and instruct other to use it. Use water to fight fire as a last resort and then only after making arrangements to abandon the boat if a fire should get out of control. If a fire is burning out of control and you must abandon the boat keep the following in mind:

- Abandon the boat into the wind to minimize burn risk from floating fuel.
- Wear a PFD unless you must swim under burning fuel.
- If swimming under burning fuel throw a PFD outside of the burning area and swim under the burning fuel to it.

Flooding

Be aware of the conditions that can cause your boat to flood with water and avoid them.

Possible causes of flooding include damage to hull or thru-hull fitting, waves washing into the boat, and water-entering cockpit due to improper loading. If you allow water to enter the boat faster than the bilge pump can expel it, the boat will become flooded and may capsize or sink.

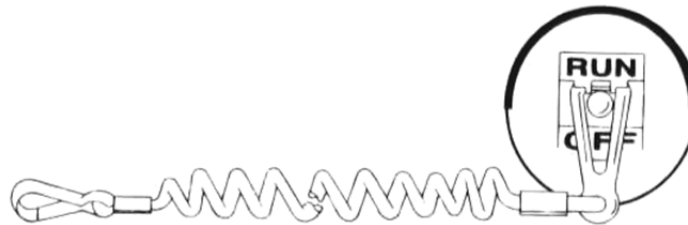
Controls

Ignition

The ignition switch has three positions, **off**, **on**, and **start**. To start the engine, attach the safety lanyard, turn the key clockwise against the spring pressure to the start position. As soon as the engine starts release clockwise pressure allowing the spring tension to return the switch to the **on** position. If the engine fails to start in 5 seconds of cranking allow the starter to cool off for 10 seconds and then repeat this procedure. For detailed instructions see the engine manual located in the Important Papers Pack.

Safety Shut Down

The Safety shut down switch shuts off the engine in case the operator is thrown from the boat or incapacitated. To ensure proper functions always attach the lanyard securely to the operator.



2-11 LANYARD STOP SWITCH

Shift/Throttle

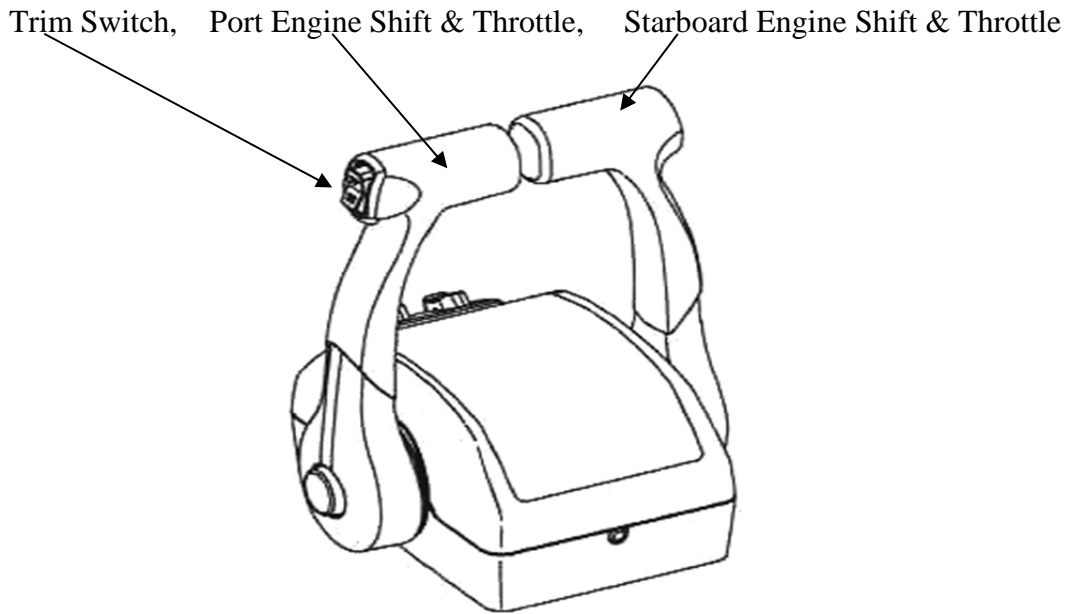
Your Pro-Line can be ordered with several different shift and throttle systems. Refer to the owner's packet to find the manual pertaining to your particular installation.

Separate shift/ throttles control the speed of each motor. Push the levers ahead for full throttle; pull mid-position back for idle/neutral. Throttle back to idle before shifting into or out of gear. Avoid over speeding the motors.

The shift/throttles levers each have three positions, **forward**, **neutral**, and **reverse**. To shift into forward push all shift levers fully ahead as one unit, pull all the way back for reverse.

When starting the engines, centralize the levers to the detent for neutral. The shift levers are equipped with a neutral safety switch to prevent the motor from starting in gear. The shift levers can be operated independently for precise maneuvering (**do so at slow speed only**).

Refer to the engine manuals in your owner's packet for specific information.



Actual Binnacle Will Vary Depending On Engine Package

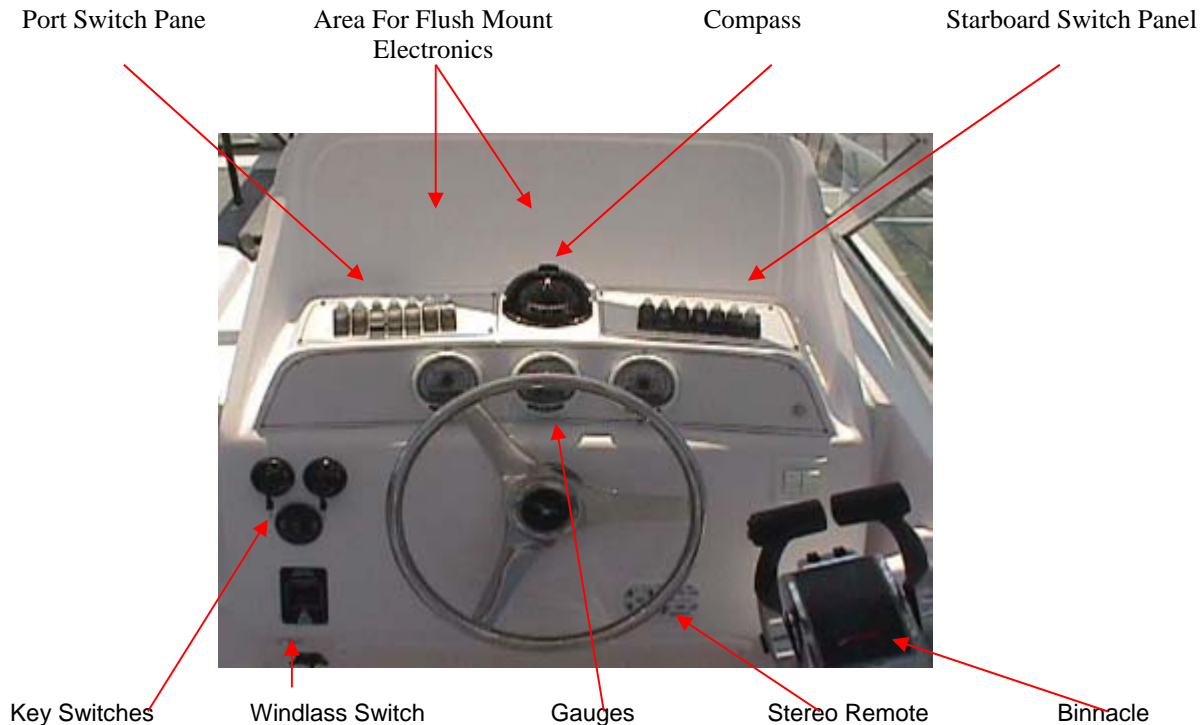
Steering

Your Pro-Line is equipped with a self-contained hydraulic steering system. When the steering wheel is turned the helm pumps fluid to the steering cylinder, causing the boat to turn. Periodically check the fluid level and fill if necessary. If the system needs fluid, refer to steering manual in the important papers packet. Every 24 hours of operation check all nuts, caps, and hose fittings for tightness. Check that the hoses are not chafing, or kinking on sharp corners. Also check that hose ends are not damaged or distorted by the clamps. If your steering does not operate properly, check the fluid level first, then look for leaking hoses or fittings and finally for air in the system. Read **STEERING INSTRUCTIONS** located in the important papers packet. Notify your dealer immediately if any problems occur with the steering system.

Instruments

Your Pro-Line instrumentation will vary according to the engine models that your boat has. Therefore the following descriptions are general. For more specific questions that you may have, or for detailed information, contact your dealer.

Helm Area



Fuel Gauge

Differences in temperature, humidity, speed and trim can affect fuel use and possibly the accuracy of this gauge. It is important to verify the fuel flow in gallons per hour for your boat and make note of your gauge position with respect to time for different RPM settings. No gauge can give 100% accuracy. If you notice unusually high or low fuel consumption, investigate further to see if the engine is using more fuel than normal. Then check to see if tank gauges has failed. Consult your dealer if there is any question about how much fuel is on board.

Water Temperature

The water temperature gauge indicates the internal water temperature of your engine. Your engine is equipped with a thermostat to quickly bring the engine up to its optimum operating temperature range. Read the engine manual for exact readings. Most engines are equipped with an audio alarm system indicating an over-heat condition. If the gauge or alarm indicates an over heat condition, immediately shut the engine off. Open the water strainers and inspect for obstructions such as aquatic vegetation or mud. After finding the source of the overheating, restart engine and confirm water flow at the exhaust outlets. If water does not flow within ten seconds at idle speed shut the engine off.

Oil Pressure

The oil pressure gauge should be checked immediately when starting the engine. The pressure range is available in the engine manual. Most engines are equipped with an audio alarm system indicating a low oil pressure condition. Follow the procedures recommended in the engine manual and if low oil pressure exists consult your dealer.

Volt Meter

The voltmeter indicates battery voltage. A normal reading is between 12 to 15.5 volts.

Never leave port if the battery condition is not correct. You may not be able to restart your engines with batteries that are not properly charged. Notify your dealer immediately if the gauge readings are not correct. Check battery voltage prior to starting and again after the engine is running at idle to insure a properly working charging system.

Tachometer

The tachometer indicates the revolutions per minute (RPM) of your engine. Do not operate the engine beyond the limits stated in your engine manual. Abnormally low tachometer readings (for a given throttle setting) indicate a loss of engine performance. Check the prop first. A reading higher than normal indicates a ventilating or cavitating propeller or propeller damage. Notify your dealer before operating your boat under these conditions.

Speedometer

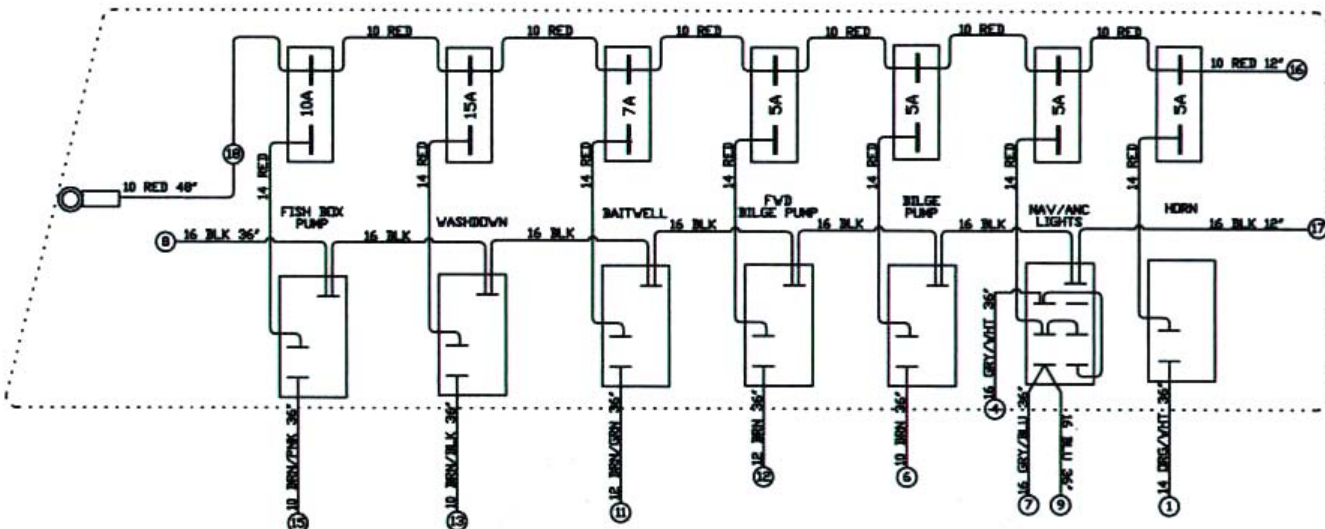
The speedometer indicates the speed of your boat in Miles per hour (MPH).

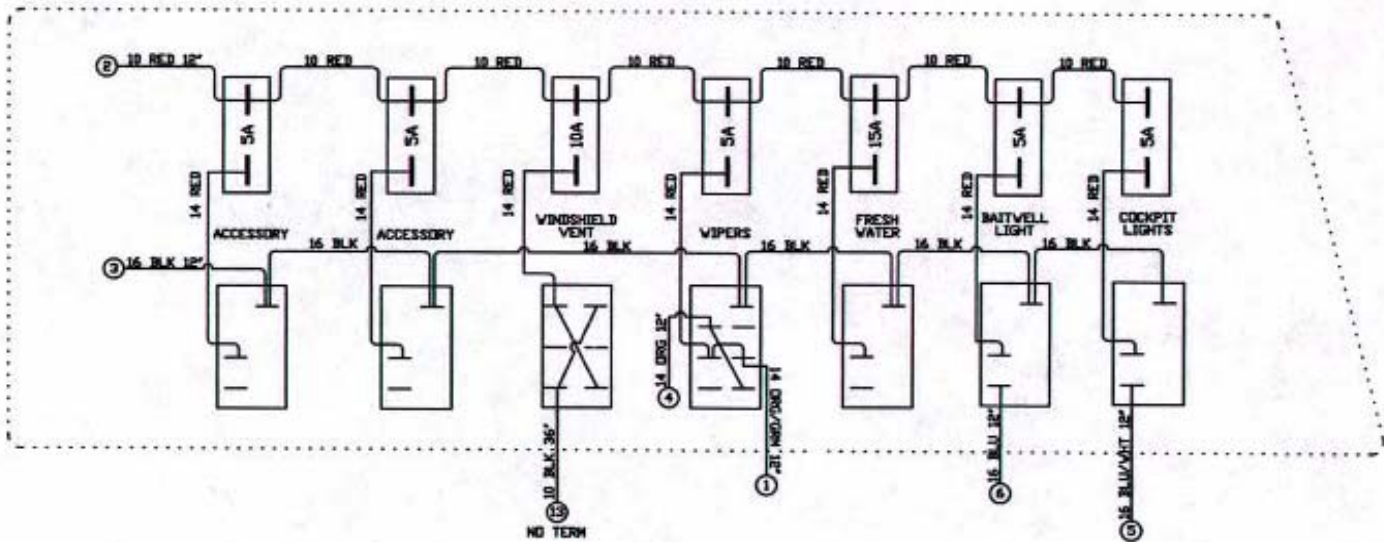
The gauge operates by sensing water impact pressure from the Pitot tube mounted on the transom. If the gauge fails to give a reading, check for a blocked pickup.

Options

See your Pro-Line dealer for the options list for this model boat. Options installed at the factory will have operating and maintenance instructions located in the important papers packet.

Example of Electronics Offered (factory installed)





Switches

Windlass

Refer to the windlass manual for operation of the windlass. The Windlass is protected by a 30A breaker located next to the windlass switch mounted on the console.

Bilge Pump

Your Pro-Line is equipped with an automatic bilge pump system with a manual override. The pump is located at the aft end of the bilge at the keel. The pump is mounted as low as possible. If the pump runs for a long time it may mean that water is entering the bilge faster than the pump can expel it. Investigate and correct the cause immediately. The automatic float switch is wired directly to the battery terminal or battery selector switch through an in-line fuse. Keep the bilge area clean and free from debris that could clog the bilge pump ports. The helm switch overrides normal automatic operation on the primary pump. Circuit breakers are located at the helm. Keep the battery charged that the bilge pump is attached to. If the battery is discharged and flooding occurs the boat could sink, causing damage and the possible loss of life and property.

Lights

For operation at night, your Pro-Line is equipped with navigation and anchor lights to indicate your position to other boaters. While running after dark the navigation lights are required to be on and visible to other boaters. Visually verify operation and lack of obstructions. Lights are also provided for the cockpit, bait-well, helm and cabin.

Breaker Switches

Circuit breakers or fuses protect the wiring on your Pro-Line. Breakers are located beside the switches or on the main breaker panel. If a device stops working immediately check to see if the circuit breaker is tripped or the fuse is blown. A tripped breaker will protrude from its set position, indicating that the circuit has been overloaded. Turn off the device(s) on the circuit then reset the breaker by pushing in once. If the breaker does not reset or if it resets and then pops out again after the device is turned back on, then a short circuit exists or your device may be damaged, overloaded or faulty. Correct the problem and then reset the breaker. If the breaker continues to pop and you are certain the device, switch and wiring are in good repair; either the breaker is too small for the load or it is faulty. Reduce the load or replace the breaker. Have this work done by your dealer or a certified marine electrician.

Trim Tabs

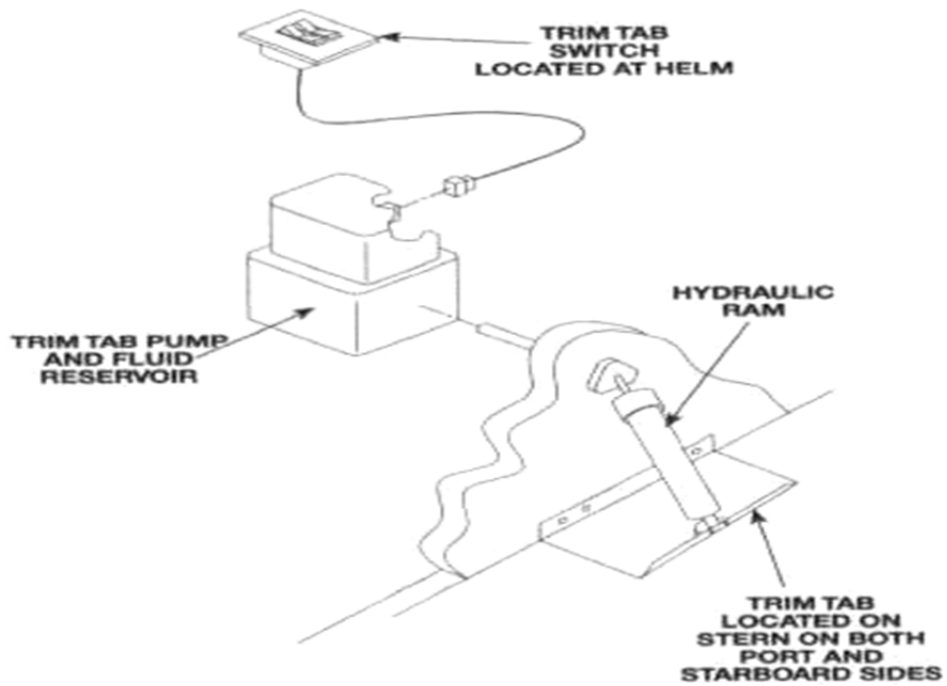
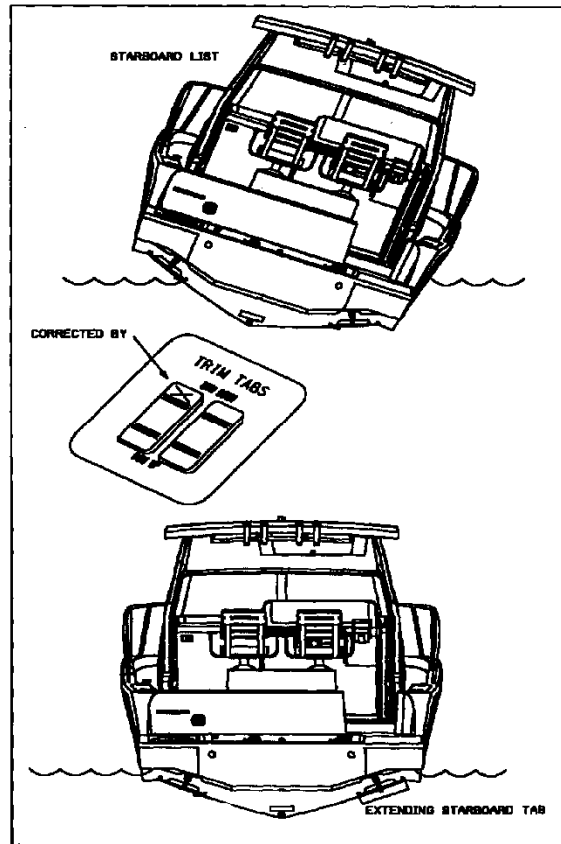
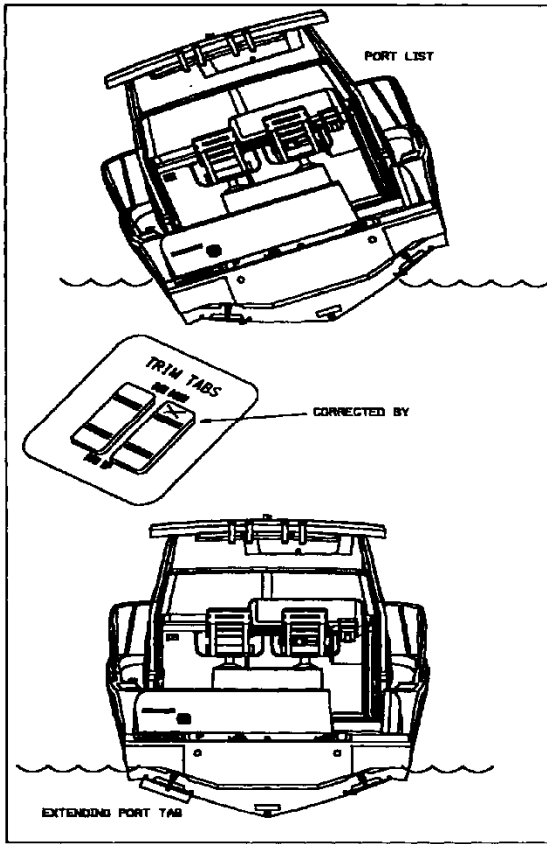
The optional trim tabs operate independently up or down to correct for differing conditions of wind or load. Indicators show the relative position of the tabs in relation to the hull. For specific information refer to owners packet. Before the boat is underway depress the bottom half of both switches until the tabs are fully elevated (bow up position) while underway and in open water clear of other boaters, depress the top half of the switches in half second bursts to achieve the desired degree of trim.

To correct a starboard list give the top half of the port switch a series of bursts until the list is corrected. To avoid over trim, allow a few seconds between bursts to allow the boat to respond (if you over trim simply give the over trimmed tab a burst or two in the opposite direction). To trim the bow down push the top half of both rockers switch in half -second bursts.

Warning: Trim tabs can cause a dramatic change in the attitude and heading of your boat. Adjust them only when in open water and clear of any obstructions Adjustments are to be made in small increments only.



Fig. 3 trim tabs, shown in the up position



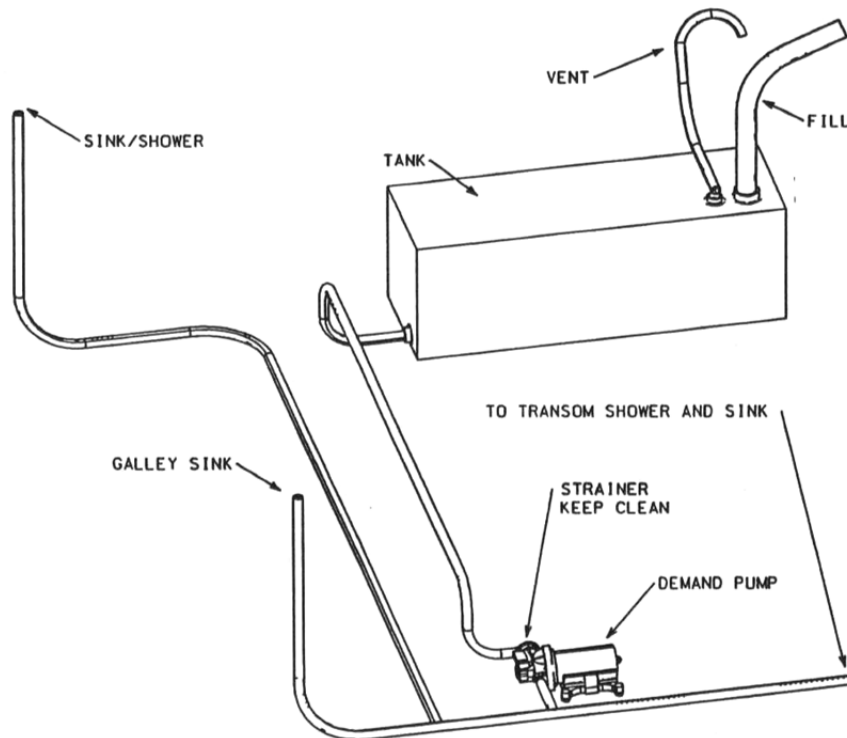
Systems

Fresh Water System

The fresh water pump on your Pro-Line supplies water on demand when a drop in water pressure activates the pressure switch. The manual switch located at the helm energizes the pump. A dockside fitting is provided. The plumbing is not designed for sustained high pressure. Do not leave the dock side water hooked up or switch on while the boat is unattended or flooding and pump damage may result. Do not run the pump dry. A fresh water tank supplies the sinks and the shower(s). The tank and pump are accessible for maintenance or repair.



Fresh water system



Actual Component Positions Vary (drawing is for reference only)

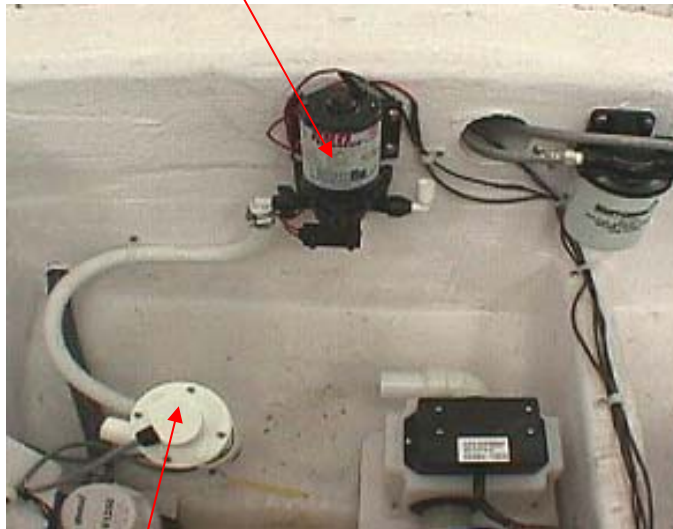
Sea Water System

The bait-well switch controls a pump mounted on a seacock in the bilge. Overflows are provided that will allow circulation to keep bait alive. The wash down pump is mounted just above the bilge pump in the bilge. The pump is equipped with a pressure switch. Turn the main switch off if the pump is not going to be used soon. Raw water is taken in by the thruhull fitting with a seacock. A strainer on the pump filters the raw water. The filter must be cleaned as needed to avoid pump damage. Seacocks on all below water line fittings should be closed when not in use.

Wash-Down is located in starboard cockpit storage box.



Wash-Down pump is located in Bilge



Baitwell Pump is located in Bilge

Fuel

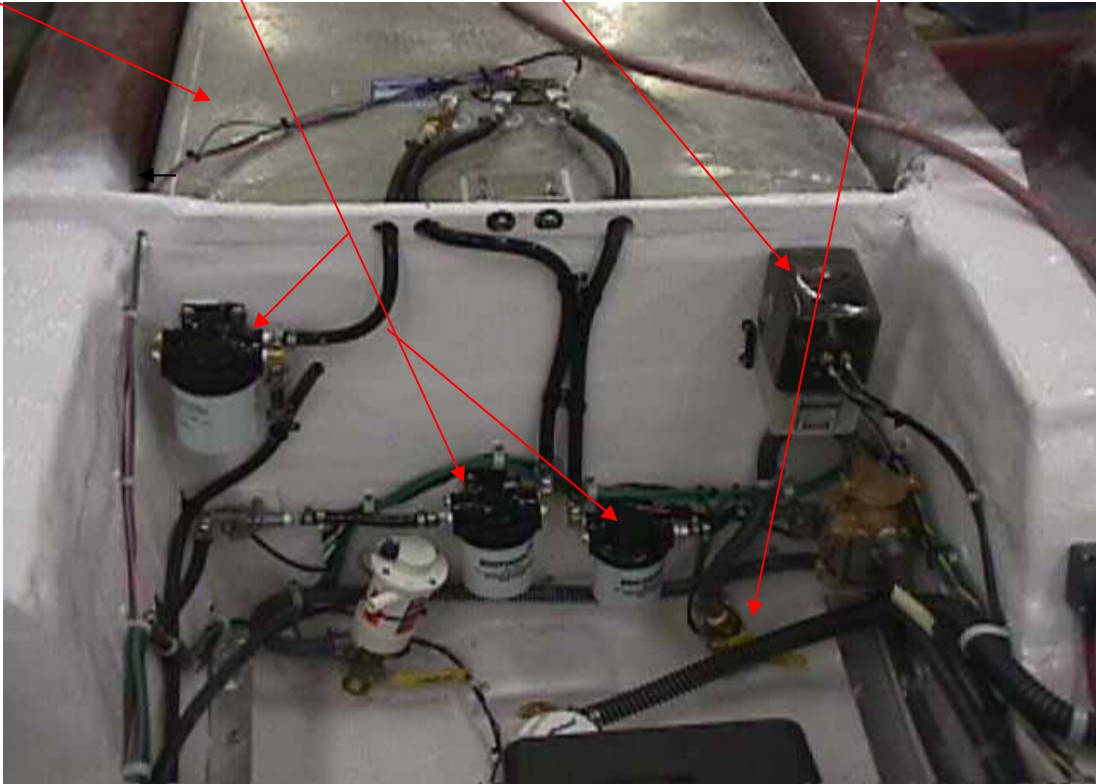
The fuel tank on your Pro-Line is made of heavy gauge aluminum with internal baffling to minimize sloshing. The tank is vented overboard. Inspect the vent for obstructions regularly. 'Deck plate' access ports are placed over the hose connections and the sending unit. Inspect the hose connections on a regular basis. Check for an odor of fuel in the bilge. Check to see if any fuel is in the bilge. Water separating fuel filter units are located in the engine room, usually on the engine. The spin on cartridges should be changed at least seasonally, more often depending on use and conditions.

Fuel Tank

Fuel/water Separators

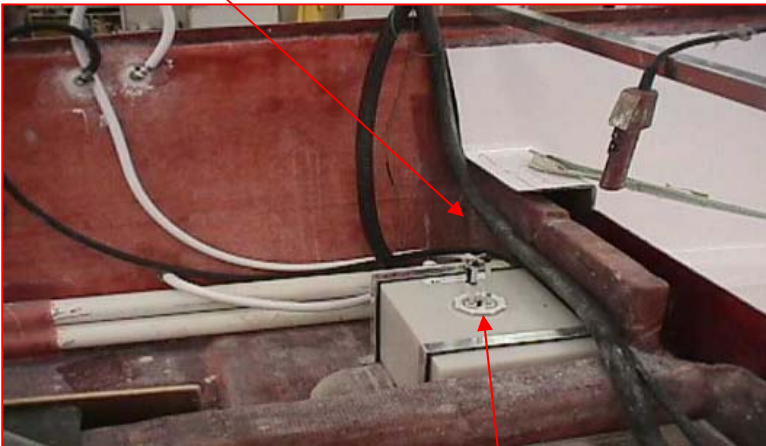
Trim Tab Pump

Generator Sea-Cock

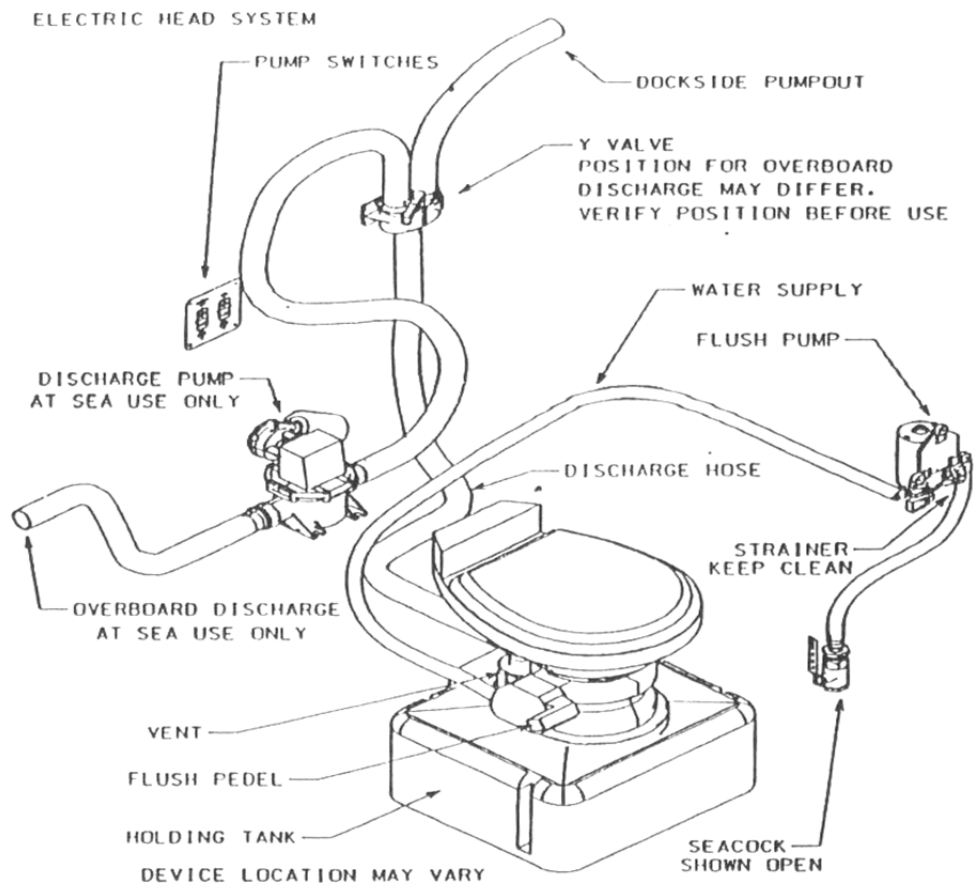


Head / Waste

Your Pro-Line is equipped with a head. Please refer to the manual supplied in your owner's packet for operation and maintenance instructions. Holding tank is located under the helm portside lounge seat. The fuel senders for the tank can be accessed through the bottom of the seat.



Holding tank for electric head.



AC/DC PANEL, LOCATED IN CABIN UNDER AFT DINNETTE SEAT.

Electrical

Direct Current

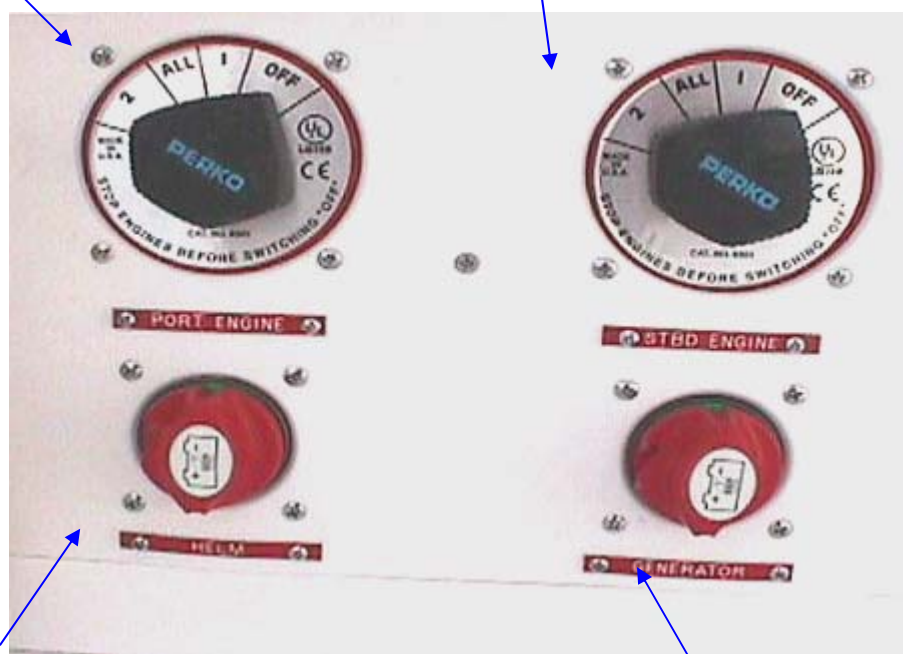
12-volt direct current provides electrical power for all lighting, pumps, electronics, and DC devices. Battery selector switches on the panel, located inside port cockpit accessories compartment, are for battery isolation, parallel operation and disconnect.

Caution: To avoid possible alternator or battery damage on twin engine installations, ensure that the optional dual battery switches are never left so both engines are connected together (never leave a switch on 'both'). Helm panel Disconnect, will allow you to disconnect power to the Helm Station when away from your boat. The preferred switch position is port engine to port battery, starboard to starboard, etc.

Battery Switches Are Located in the Starboard Cockpit Accessories Compartment

Port Engine

Starboard Engine



Helm Disconnect Switch

Generator (option) Disconnect Switch

All Switches Shown In The Off Position



Factory Installed Generator (opt). Located in bilge area to provide AC (110volts electricity) while under way and/or away from shore power.

Aftermarket Accessories

Your Pro-Line's electrical system was designed for factory tested and approved dealer installed optional accessories. Pro-Line makes no recommendations to the suitability of accessories that are not listed in the Pro-Line sales literature. Any unapproved modifications or additions to the standard or optional system are done at the owner's risk and void the warranty. Unapproved modifications could cause risk of fire or failure of the electrical system.

Operation and Performance

Loading

The capacity plate states the maximum persons and the maximum weight in pounds for persons, engine and gear that the boat will safely accommodate under normal conditions. These load capacity ratings are computed using USCG formulas. For operation in rough and adverse conditions reduce the boats load to permit safe operation.

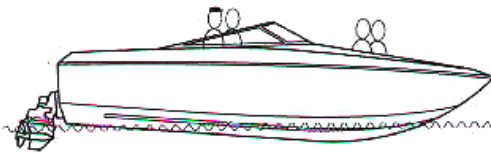
The performance of any boat is a function of the amount of load carried. Heavy loads reduce performance. Depending upon conditions and what engine/hull combination you have selected, your boat may not be able to stay on plane when loaded to its maximum rated capacity.

When loading your Pro-Line always:

- Maintain a balance both port to starboard and bow to stern.
- Keep heavy items as low as possible.
- When boarding, step (never jump) into the boat one person at a time.
- Pass gear from the dock to someone in the boat, do not carry gear while boarding.
- Never allow passengers to ride with feet hanging over the side of the boat.
- Do not allow passengers to sit or stand on top of the stern, or gunwales.



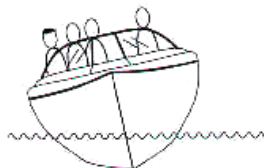
CORRECT
Balanced load: gives
maximum performance



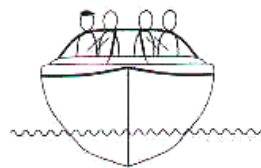
INCORRECT
Overload forward: causes
boat to "plow"



INCORRECT
Overload aft: causes
boat to "porpoise"



INCORRECT



CORRECT

Fueling

Due to the explosive nature of gasoline certain precautions must be observed when fueling.

Before Fueling-

- Secure the boat to the dock with adequate moorings.
- Turn off engine and any equipment having brush type (spark producing) contacts.
- Close cabin doors and hatches so fumes don't enter boat.
- Disembark all persons not necessary for the fueling operation.
- Prohibit all smoking and open flame on board and nearby.
- Have a fire extinguisher close by.

While Fueling-

- Keep nozzle in contact with fill opening to minimize chance of sparks.
- Do not leave unattended.
- Do not spill fuel.
- Do not over fill, filling a tank until fuel is vented is dangerous. Allow room for expansion.

After Fueling-

- Close fill opening.
- Wipe up any spilled fuel. Dispose of rags on shore.
- Open cabin's door and ventilate the boat
- Check for fumes in bilge, continue to ventilate if fumes are present.

Starting

Before Starting Engine:

- Ventilate all enclosed spaces.
- Visually inspect the bilge for raw fuel and smell for vapors.
- Visually make sure propeller is clear of obstructions or swimmers.
- Lock the helm seats to face straight forward.
- Attach safety lanyard.

Starting Engine:

- Start the engine in accordance with the instructions provided in your engine manual.

After Starting Engine:

- After your engine starts observe these basic rules to ensure that the engine is functioning properly:
- Check oil pressure gauge immediately.
- Verify engine cooling water circulation.
- Monitor the water temperature gauge to make sure the engine is warming properly.
- Check for fuel, oil and water leaks in the engine room. Shut down and correct if found.
- Follow the break-in procedures for your engine.

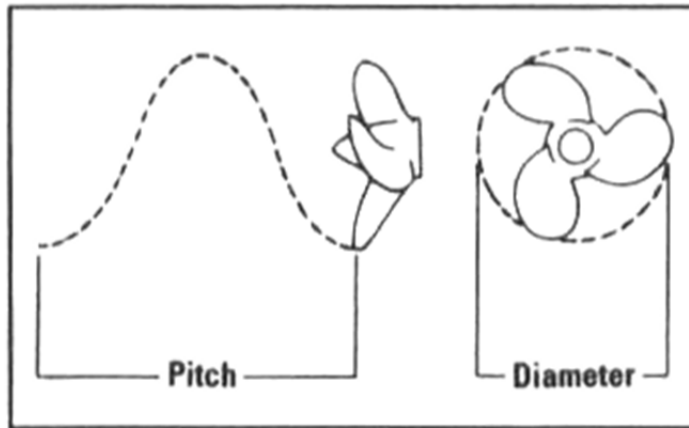
Propellers

When your Pro-Line was ordered, the factory installed engine and propeller has been performance tested to provide the best all-round performance for operation at sea level.

In some situations, it may be desirable to re-prop your Pro-Line to enhance desired performance needs. For instance:

- Propping for higher altitudes
- Propping for heavier loads
- Propping for improved acceleration
- Propping for improved cruising range or speed

When re-propping insure that you do not over-rev the engine at top speed. Engine damage could result. **Operating your engine with a damaged prop will decrease top speed, increase fuel consumption and may introduce undesirable handling characteristics. The vibration caused by running a damaged prop could cause costly damage to your reduction gear, shaft seals, propeller shaft, strut and cutless bearing.**



Service and Care

To enjoy trouble free use of your Pro-Line follow the recommended procedures and instructions relating to the service and care of your boat. Failure to follow these recommended maintenance practices will result in shorter life of your equipment and may void your warranty.

Much of the installed equipment on your boat is separately warranted, follow the care instructions found in your owner's packet to keep these warranties in force. Your engine manual contains service information relating to your particular engine installation. Follow the provided recommendations for trouble free service, and to preserve your warranty.

Fiberglass and Gel Coat

The gel-coated fiberglass on your boat provides a smooth surface that is easy to clean and maintain. Regular cleaning and waxing will preserve the finish on your boat for many years to come.

Use a mild detergent and plenty of fresh clean water to swab down the exposed gelcoat of your boat. Don't use harsh cleaners containing ammonia, chlorine or abrasives. Do not use acetone or any reducing solvents. Stubborn stains can be removed with alcohol or kerosene provided they are washed off immediately and completely with mild detergent and water. Wax all gel coated surfaces a minimum of twice a year. Wax more often if the boat is stored in the sun. If due to neglect the surface takes on a dull appearance that is not restorable by waxing, hand buff with a rubbing compound, then wax. Your dealer can provide advice and the necessary products to complete the job.

Caution: When power buffing use care not to leave swirl marks or "burn" the surface. You may want to leave power buffing to a professional. The gel coat on your boat is approximately 25 mils thick. Minor scratches and deep stains

that do not penetrate the gel coat can be lightly wet sanded with 600 grit, buffed and waxed to remove. If a deep gouge to the surface occurs that goes all the way through the gel coat into the fiberglass it must be repaired promptly to avoid further damage. Your dealer is best equipped to handle this repair and achieve good bonding and color match. There are many different gel coat repair kits on the market for this use, however results obtained may not be satisfactory. For damage to fiberglass that goes deeper than 1/16 inch see your Pro-Line dealer.

Marine Growth

Marine growth is a problem with unpainted hull bottoms. Consult your dealer about an anti-fouling finish for the portions of the hull below the water line. Consult your dealer to determine the conditions under which your boat will be moored. Establish a program for periodic inspections of the boat's bottom according to these conditions.

Windows and Hatches

To clean acrylic, rinse with fresh water to remove as much grime as possible. Use your bare hand with lots of water so you can feel any grit and avoid grinding it in to the surface as you dislodge it. When all material that may cause damage is gone, use a soft clean cloth with a non-abrasive mild detergent and clean fresh water. Rinse and blot dry with a clean dry chamois.

Grease and adhesives may be removed with kerosene, hexane or white gas (not gas you burn in your boat, car or lawnmower).

Never use, solvents like acetone, silicone spray, benzene, carbon tetrachloride, dry cleaning fluid, lacquer or paint thinner, or any chlorinated solvent, on acrylic. They will dissolve the material.

Stainless Steel and Aluminum

Stainless steel is used on bow rail and deck fittings on your Pro-Line. Stainless is corrosion resistant but not corrosion proof. If used in contact with sulfides, chloride salts, or rusting metals, stainless will show rust spots, discolor or corrode. The grain structure of stainless, when modified by welding processes has increased susceptibility to micro-corrosion (invisible to the unaided eye) and embrittlement. Proper care will preserve the weld strength and beauty of your stainless:

- Always clean with soap and water. Most glass cleaners work. **Clean frequently.**
- Always protect with a wax, especially around welds to guard against micro-corrosion cracking and rust spots.
- Always remove rust spots as they appear with brass, silver or chrome cleaner.
- Never use coarse abrasives like sandpaper or steel wool, as these can cause rusting and corrosion.
- Never clean with acids or bleaches.
- Never permit contact with iron, steel or other metals that can cause rust or corrosion.

Canvas

Cleaning: Brush the canvas with a soft bristle brush and hose down at regular intervals to remove bird droppings, dust and dirt particles. It may be washed with a mild solution of natural soap in lukewarm water (less than 100 degrees Fahrenheit). **DO NOT USE DETERGENTS.**

For more stubborn stains soak the canvas in a solution of four ounces of a non-chlorine bleach and natural soap mixed with one gallon of warm water for about 20 minutes. Rinse with cold water.

Note: If the water repellent is lost due to cleaning, apply a water-repellent treatment as necessary.

The canvas may be washed in an automatic washing machine set on 'cold' using 2 cups non-chlorine bleach 1-cup natural soap. **DO NOT DRY IN A DRYER, LINE DRY ONLY** to prevent shrinkage. If water won't bead on dry surface, re treat with water repellent.

Storage: Do not fold or store any canvas while wet. All canvas should be rolled or folded when dry and kept in a clean dry location.

Upholstery

Vinyl

An occasional wipe down with mild soap and water is required on all interior and exterior vinyl in order to remain in good condition for many years. We do not recommend the use of any special cleaners, sealers or treatments for interior or exterior vinyl. Refer to the brochure that is included in your important papers package.

Fabric

For all fabrics use dry cleaning fluid only.

Corrosion Protection

If you moor your Pro-Line in salt water for extended periods make sure to check the anti-corrosion anode often for operation. Your motor / drive unit has a sacrificial anode to mitigate the effects of corrosion causing, electrolysis. Maintain this anode in accordance with the maintenance schedule in your engine manual. Make sure the anode surface is exposed and not caked with corrosion and scale. If the anode is eroded replace it.

Winterization and Storage

Pre-Storage Check List

- Remove drain plug, keep bow high to drain any water accumulation.
- Run a pint of RV antifreeze through bilge pump.
- Drain all water from water systems and head.

- Fill fuel tanks and add a stabilizer such as 'STA-BIL' to the gasoline.
- Prepare the engine in accordance with manufactures recommendations found in your engine manual.
- Treat metal parts with rust inhibitor.
- Remove the battery and protect from freezing. Trickle charge overnight once a month.
- Place under cover.

Fitting Out After Storage

- Check entire fuel system for loose fittings, leaks and damage.
- Clean battery terminals, install battery(s), and coat terminals with a deoxidizing agent.
- Check all through hull fittings and hoses for obstructions, leaks, tightness and condition.
- Test navigation, anchor and other lights for operation.
- Check wiring, terminal blocks and plugs for loose connections and corrosion.
- Verify switch and equipment operation.
- Check the condition of anchor lines, anchor and rode.
- Install the hull's drain plug and clean out any debris from bilge and cockpit.
- Remove antifreeze and flush water system.

Trouble Shooting Chart

PROBLEM:

POSSIBLE CAUSE:

Poor speed or fuel economy:

- *Wrong propeller for load or conditions.
- *Trim is in too far.
- *Load is too far forward or too heavy, or boat has taken on water.
- *Marine growth on hull, Line or anchor dragging.
- *Fuel is stale or partially blocked, engine is worn, out of tune or under-powered .
- *Improper rigging, air intake or exhaust partially blocked.

Engine cranks but will not start:

- *Out of fuel, filter is clogged, fuel line kinked or fuel vent plugged.
- *Water in fuel.
- *Engine problem, (electrical, fuel pump, blockage, etc.).
- *Safety shut down switch lanyard not installed.

Engine will not crank:

- *Drive is in gear (check operation of the throttle release).
- *Battery is weak or terminals corroded or loose.
- *Engine or drive damage.

Engine runs but boat won't go:

- *Throttle release is engaged.
- *Disconnected shift linkage.
- *Damaged prop, or lower drive unit.
- *Entangled in lines or weeds, or Anchor is down.

Prop cavitates:

- *Trim out too far, motor too high.
- *Weeds on prop.
- *Bow heavy, damage to hull.

Excessive vibration:

- *Propeller, engine, or drive unit damaged.
- *Hull damage.

Boat won't turn:

- *Steering unit needs fluid or has trapped air, tiller is disconnected. (Helm turns)
- *Steering trunion or mechanism jammed. (Helm won't turn)

Electrical problems

(See wiring diagram)

- *Corroded wires, terminals, or plugs.
- *Broken, loose or short circuited wires.
- *Circuit breaker tripped.
- *Defective switch, device or breaker.
- *Inline fuse burnt out.
- *Overloaded circuit.

Handling problems like:

Porpoises

Runs wet

Hard ride

Lists

Over banked in turn

Catches in turns

- *Trimmed out too far, damaged hull (rocker), trim tabs up, stern heavy.
- *Trimmed in too far, bow heavy, trim tabs down, overloaded for conditions.
- *Stern heavy, trimmed in too far, going too fast for conditions.
- *Loaded to one side, trim tabs set wrong, trimmed too far in, fuel tanks uneven.
- *Trimmed in too far, improperly located load, throttle advanced too far.
- *Damaged hull (hook), stern heavy, trim tabs down.

Nautical Terms

Abeam: At 90 degrees to the centerline of the boat, exactly to either side of the boat.

Abaft: A point on a boat that is aft of another boat

Aft: Toward the rear of the boat.

Beam: The widest part of the boat.

Bilge: The lower interior of the hull.

Bow: The fore part of a boat.

Bulkhead: A vertical partition or reinforcement in a boat usually perpendicular to the keel.

Chine: The juncture of the bottom and the side of the boat.

Chock: Deck fitting used to guide a line.

Cleat: Deck fitting used to secure a line to.

Deck: Upper structure of a boat that covers the hull.

Draft: The distance the lowest part (usually the keel) of the boat projects into the water.

Fathom: A unit of measure equal to six feet.

Freeboard: The height of the deck above the water line.

Gunwale or Gunnel: The Juncture of the side of the cockpit, deck and hull.

Hatch: An opening used for access to an interior space.

Head: Toilet or toilet area in a boat.

Helm: Steering wheel or console area of a boat.

Hull: The basic structure of a boat, which provides flotation by displacing and excluding water.

Keel: The major lengthwise member of the hull, the lowest portion of the hull.

Knot: A measure of speed in nautical miles per hour, equal to 1.15 MPH

Lee: The side sheltered from the wind.

Port: The left side of the boat when aboard the boat facing the bow.

Scupper: Duct to drain water from the cockpit, usually with a check valve to prevent seawater intrusion.

Sheer: The juncture of the deck and the hull generally covered by the rub rail.

Starboard: The right side of the boat when aboard the boat facing the bow.

Stern: The back of the boat.

Stringer: Lengthwise reinforcing members of the hull.

Transom: Vertical part of the stern.

Wake: Waves produced by a boat moving through the water.

Windward: Toward the direction from which the wind is blowing.

Appendix: Boat Identification Information

Owner: _____

Home Port: _____

Dealer: _____

Boat Name: _____

Registration No: _____

Hull No: _____

Boat Model: _____ LOA: _____ Beam: _____ Draft: _____

Vertical Clearance: _____ Hull: _____ Deck: _____

Warranty Registration Date: _____

Fuel Capacity Gal.: _____ Key No: _____

Radio Call Letters: _____ Batteries: _____

Engine Make & Model: _____ HP: _____

Engine S/N: _____

Prop: Diameter: _____ Pitch: _____ P/N: _____

Insurance Company: _____

Agent: _____

Policy No.: _____ Phone No.: _____

Some Factory installed options:

Generator:



Air Conditioner:



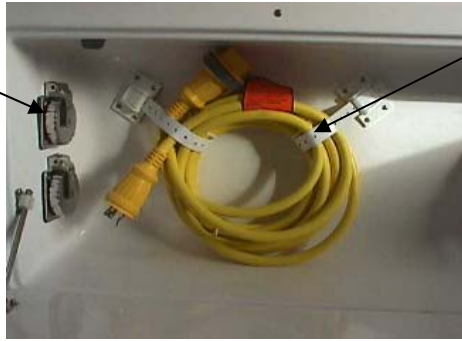
Ice Maker in Bait Station:



Standard Factory Installed Features:

Shore Power Inlet:

Shore Power Cord w/ Hangers



25' Washdown Coil:



110 volt Water Heater: Located under the mid-berth bunk area.



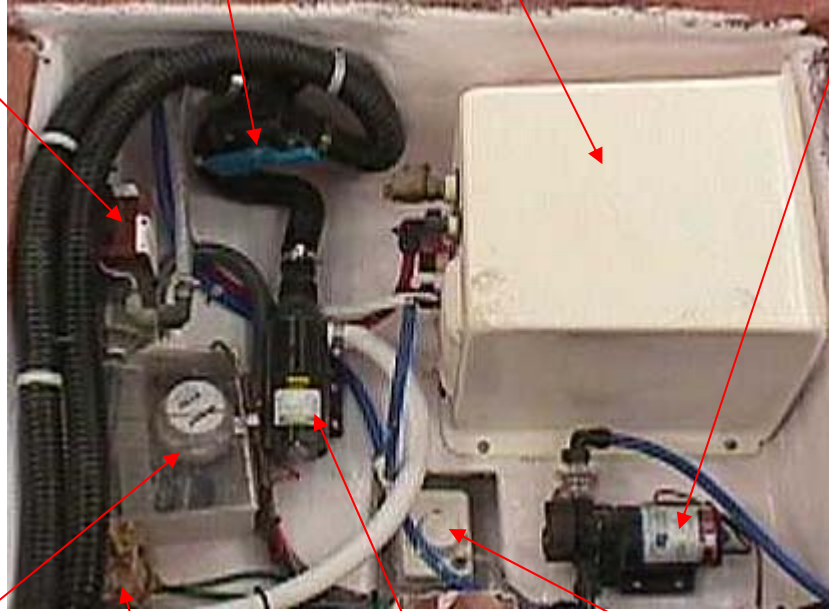
List Of Components Under Aft Berth (access under mattress).

Air Conditioner Pump:

Head "Y" valve:

Water Heater:

Fresh Water Pump:



Shower Sump Pump

Air Conditioner
Strainer

Head Macerator

Forward Bilge Pump

Cockpit Bait Station (shown w/ optional Ice Maker).

