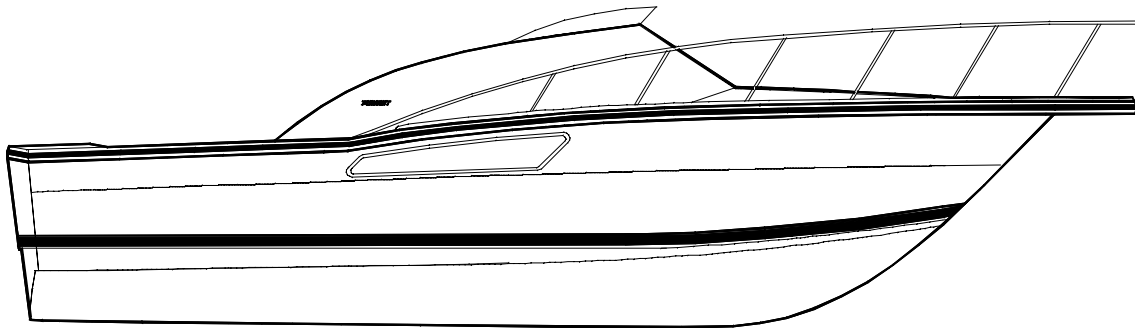


PURSUIT®

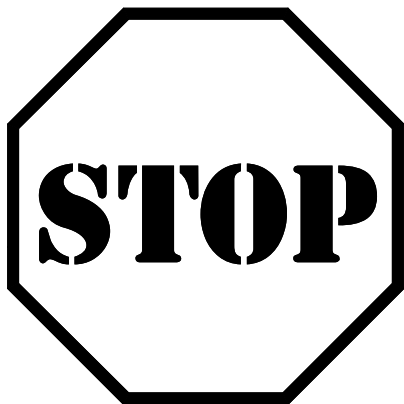
3000 OFFSHORE EXPRESS

Owner's Manual



PURSUIT FISHING BOATS
725 EAST 40TH STREET
HOLLAND, MI 49423-5392
USA
616-392-7163
FAX 616-394-7466

A DIVISION OF S2 YACHTS, INC.



READ THIS FIRST

The Owner's Manual for your new **PURSUIT** 3000 Offshore Express has been carefully prepared to include all the necessary information for the safe operation and maintenance of your boat. Before going any further, please help us to assure this by checking your manual to be sure it includes the following pages. After checking, please return this page to us in the envelope provided, and we'll send you a free gift! Please indicate any missing items so that we may send them to you. We have also included a copy of this page for your future reference. Thank you for your help.

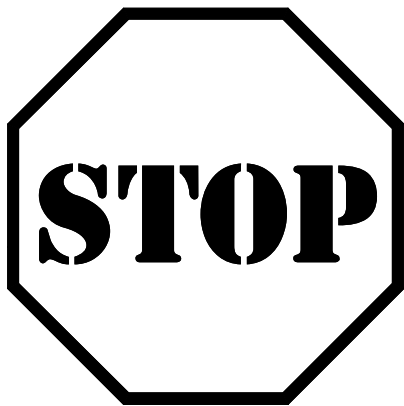
- ☐ Cover Page
- ☐ Letter from Leon Slikkers
- ☐ "Important Information" Page
- ☐ Table of Contents pages i to vi
- ☐ Chapter 1: Exterior Equipment and Features . pages 1-1 to 1-26
- ☐ Chapter 2: Interior Equipment and Features . pages 2-1 to 2-16
- ☐ Chapter 3: Operating Your Boat pages 3-1 to 3-10
- ☐ Chapter 4: Commissioning Your Boat pages 4-1 to 4-10
- ☐ Chapter 5: Routine Maintenance pages 5-1 to 5-18
- ☐ Chapter 6: Storing and Winterizing pages 6-1 to 6-12
- ☐ Appendix A: Specifications pages A-1 to A-2
- ☐ Appendix B: Glossary pages B-1 to B-8
- ☐ Appendix C: Wiring Diagrams pages C-1 to C-4

Owner's Name _____

Address _____

Phone Number _____

Boat Serial Number _____



READ THIS FIRST

The Owner's Manual for your new **PURSUIT** 3000 Offshore Express has been carefully prepared to include all the necessary information for the safe operation and maintenance of your boat. Before going any further, please help us to assure this by checking your manual to be sure it includes the following pages.

This page is to be kept for your reference.

- ☐ Cover Page
- ☐ Letter from Leon Slikkers
- ☐ "Important Information" Page
- ☐ Table of Contents pages i to vi
- ☐ Chapter 1: Exterior Equipment and Features . pages 1-1 to 1-26
- ☐ Chapter 2: Interior Equipment and Features . pages 2-1 to 2-16
- ☐ Chapter 3: Operating Your Boat pages 3-1 to 3-10
- ☐ Chapter 4: Commissioning Your Boat pages 4-1 to 4-10
- ☐ Chapter 5: Routine Maintenance pages 5-1 to 5-18
- ☐ Chapter 6: Storing and Winterizing pages 6-1 to 6-12
- ☐ Appendix A: Specifications pages A-1 to A-2
- ☐ Appendix B: Glossary pages B-1 to B-8
- ☐ Appendix C: Wiring Diagrams pages C-1 to C-4

IMPORTANT INFORMATION

Your **PURSUIT** 3000 Offshore Express Owner's Manual has been written to include a number of safety instructions to assure the safe operation and maintenance of your boat. These instructions are in the form of **WARNING** and **CAUTION** statements. The following definitions apply:



HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



Hazards or unsafe practices which could result in minor personal injury, or product and property damage.

All instructions given in this book are as seen from the stern looking toward the bow, with starboard being to your right, and port to your left. A glossary of boating terms is included in the Appendix.

IMPORTANT NOTE: Your boat uses internal combustion engines and flammable fuel. Every precaution has been taken by **PURSUIT** Fishing Boats to reduce the risks associated with possible injury and damage from fire or explosion, but your own precaution and good maintenance procedures are necessary in order to enjoy safe operation of your boat.

This page intentionally left blank.

TABLE OF CONTENTS

Chapter 1: EXTERIOR EQUIPMENT AND FEATURES

HELM AREA	1-1
Steering.	1-1
Engine Controls	1-1
Engine Monitoring	1-4
Switch and Breaker Panels	1-5
Trim Tabs	1-8
Equipment Controls	1-9
Miscellaneous.	1-11
Companionway Door	1-12
Seating	1-14
Engine Hatch.	1-14
Engine Room.	1-16
Cockpit Prep Center/Bait Station	1-16
COCKPIT AREA.	1-17
110V Shore Power	1-18
Dockside Water	1-20
Covering Boards	1-21
Transom Fish Box	1-21
Transom Door and Gate	1-21
Cockpit Floor.	1-21

TABLE OF CONTENTS

Hardtop	1-22
SIDE DECKS	1-22
FOREDECK	1-23
HULL SIDES AND TRANSOM	1-24

Chapter 2: INTERIOR EQUIPMENT AND FEATURES

FORWARD BERTH AND PORT SIDE LOUNGE .	2-1
HEAD	2-4
ROD LOCKER	2-5
GALLEY	2-5
STARBOARD LOUNGE	2-6
Table.	2-7
COMPANIONWAY	2-7
Battery Switches.	2-7
D.C. Main Breaker Panel	2-7
Generator Panels	2-9
A.C. / D.C. MAIN DISTRIBUTION PANEL	2-10
12 V D.C.	2-10
110 V A.C.	2-13
Carbon Monoxide Monitoring System	2-15

Chapter 3: OPERATING YOUR BOAT

WHEN ARRIVING AT YOUR BOAT	3-1
Shore Power / Shore Water	3-2

TABLE OF CONTENTS

Fueling Your Boat	3-2
Starting Your Engines	3-4
Starting the Generator	3-6
LEAVING AND RETURNING TO THE DOCK . . .	3-6
WHILE UNDERWAY	3-7
Anchoring	3-8
Towing	3-9
AFTER RETURNING TO THE DOCK	3-9

Chapter 4: COMMISSIONING YOUR BOAT

BEFORE LAUNCHING YOUR BOAT	4-1
Bottom Paint	4-1
Bilge Areas	4-2
Electrical Systems	4-2
Installing the Propellers	4-3
LIFTING YOUR BOAT	4-5
AFTER LAUNCHING YOUR BOAT	4-5
Fresh Water System	4-6
Electrical Systems	4-7
Engines and Transmissions	4-7
Interior Equipment	4-8
Exterior Equipment	4-8

TABLE OF CONTENTS

Chapter 5: ROUTINE MAINTENANCE

FUEL SYSTEM.	5-1
FRESH WATER SYSTEM	5-4
ELECTRICAL SYSTEM.	5-6
12V D.C. System.	5-6
110V A.C. System.	5-7
EXTERIOR EQUIPMENT AND FIBERGLASS.	5-7
Fiberglass Surfaces	5-8
Plexiglass.	5-9
Hardware	5-9
Canvas and Upholstery	5-9
Hull Bottom.	5-10
Underwater Gear	5-10
INTERIOR EQUIPMENT AND DECOR	5-10
ENGINE ROOM	5-11
Engines, Transmissions and Generator	5-12
Stuffing Boxes	5-12
Ventilation System	5-12
Raw Water Intake Strainers	5-13
HEAD SYSTEM	5-14
DRAINAGE SYSTEM	5-17

Chapter 6: STORING AND WINTERIZING YOUR BOAT

Supporting the Boat During Storage	6-1
--	-----

TABLE OF CONTENTS

Storage 6-1

FUEL SYSTEM. 6-2

FRESH WATER SYSTEM 6-3

ELECTRICAL SYSTEM. 6-4

 12V D.C. System. 6-4

 110V A.C. System. 6-4

EXTERIOR EQUIPMENT AND FIBERGLASS. . . . 6-5

INTERIOR EQUIPMENT 6-5

 Air Conditioning. 6-5

 Head System 6-7

ENGINE ROOM AND BILGE AREAS. 6-7

 Engines, Transmissions and Generator 6-8

 Exhaust Systems. 6-8

 Raw Water Systems 6-8

 Steering System 6-10

***Appendix A:* SPECIFICATIONS**

GENERAL A-1

BOAT SPECIFIC. A-2

***Appendix B:* GLOSSARY**

GLOSSARY B-1

TABLE OF CONTENTS

Appendix C: WIRING DIAGRAMS

12 V D.C. SCHEMATIC C-2

110 V A.C. SCHEMATIC C-4

Chapter 1

EXTERIOR EQUIPMENT AND FEATURES

1 . 1 . HELM AREA

1 . 1 . 1 . Steering

On boat centerline, to port of the companionway into the cabin is the helm of your **PURSUIT** 3000 Offshore Express (see Figure 1-1). In the center is the steering wheel which is connected to a hydraulic pump behind the console. This hydraulic pump operates a hydraulic cylinder at the stern of your boat and controls rudders on the port and starboard sides.

1 . 1 . 2 . Engine Controls

The engine clutch and throttle controls are to each side of the steering wheel, clutches to port, throttles to starboard. The clutch handles (port handle for port engine, starboard handle for starboard engine) are vertical when the engine transmissions are in neutral. The engines are shifted into forward by pushing the handles forward from vertical and are shifted into reverse by pulling the handles aft from vertical. When shifting from forward to reverse, or vice versa, you should pause momentarily at neutral. The throttle handles are all the way aft when the engines are at idle and all the way forward at wide, open throttle.



1 - 1 : Helm Console



Only shift from forward to neutral to reverse with the engines at idle speed. Failure to do so could result in severe transmission damage.

To port, in the vertical face of the console, are the ignition key switches (see Figures 1-2 and 1-3). For gas engines, the port switch starts and stops the port engine, the starboard switch, the starboard engine. Turning the ignition key switches all the way counter-clockwise is the OFF position. The key in this position will shut down the engines if running. One step clockwise from OFF is the ON position. One more step clockwise from ON is the START position. START is used when cranking the main engines. The key will automatically return to ON when released.

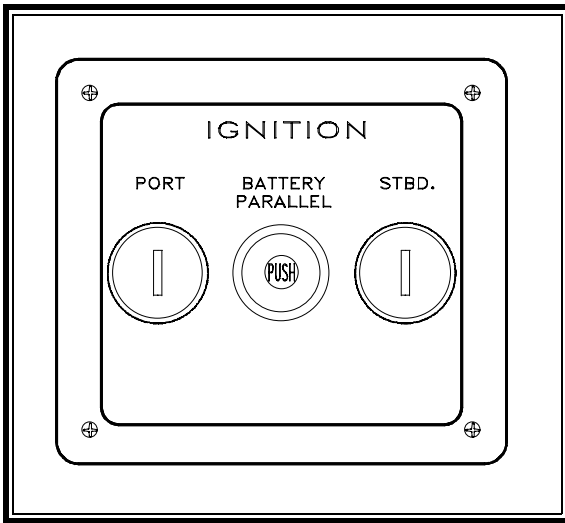


Figure 1-2: Gas Ignition Switches

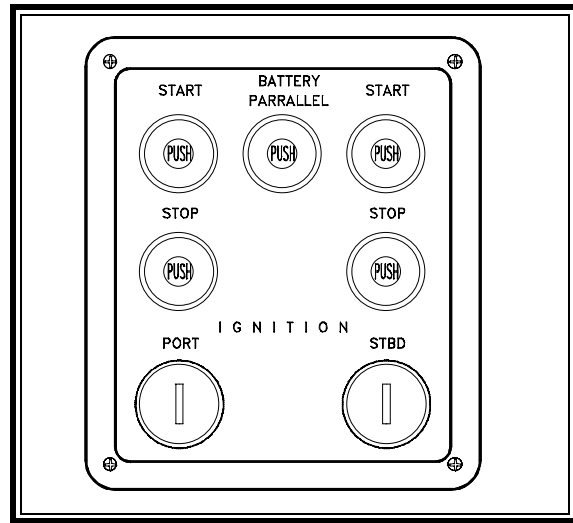


Figure 1-3: Diesel Ignition Switches

from the START position. Between the key switches is the battery parallel switch. This switch would be depressed, if needed, to use both port and starboard batteries to crank the engine. The switch must be depressed continuously while cranking and will return to non-parallel mode when released.

For diesel engines, the port switch starts and stops the port engine, the starboard switch, the starboard engine. Turning the ignition key switches all the way counter-clockwise is the OFF position. One step clockwise from OFF is the ON position. One more step clockwise from ON is the START position. START is used when cranking the main engines. The key will automatically return to ON when released from the START position. Between the key switches is the battery parallel switch. This switch would be depressed, if needed, to use both port and starboard batteries to crank the engine. The switch must be depressed continuously while cranking and will return to non-parallel mode when released. To stop the engines, press the stop button below the ignition switch for the engine you would like to stop. Remember to return the ignition switch to the OFF position after the engine has stopped.

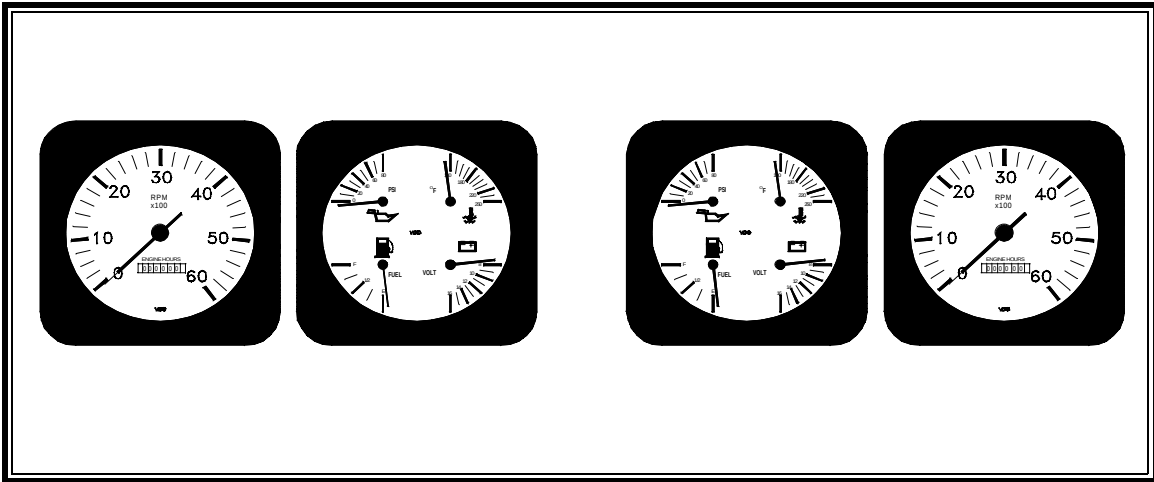


Figure 1-4: Engine Gauges

1.1.3. Engine Monitoring

In the console, forward of the steering wheel, in the vertical face, are the engine gauges (see Figure 1-4). These gauges monitor the status of the engine(s) while they are running. The gauges to port are for the port engine, the gauges to starboard are for the starboard engine. The following gauges are provided for each engine:

- ⚓ **Tachometer** - Indicates the engine speed in RPM (revolutions per minute).
- ⚓ **Engine Hours** - Indicates the total number of hours the engine has run.
Note: This gauge senses hours that the key switch is in the ON position. Failure to keep key switches in OFF position when the engines are stopped will result in inaccurate readings on hour meters.
- ⚓ **Oil Pressure** - Indicates the engine oil pressure in PSI (pounds per square inch).
- ⚓ **Engine Temperature** - Indicates the engine cooling water temperature in °F (degrees Fahrenheit) and °C (degrees Celsius).
- ⚓ **Volts** - Indicates the condition of the battery in V (Volts).

- ⚓ **Fuel** - Indicates level of fuel in the fuel tank, in fractions of a full tank. The port gauge is for the standard tank. The starboard gauge is for the optional auxiliary tank.

IMPORTANT NOTE: The fuel tank in your **PURSUIT** 3000 is **not** rectangular in cross section. Consequently, the amount of fuel in the last 1/4 of the tank level is **less than** 1/4 of the fuel available in a full tank.

Note: The engine hour meter is in the tachometer. The oil pressure, engine temperature, volt and fuel gauges are also clustered together.

Situated between the two helm switch panels, forward of the steering wheel, are two indicator lights for the mid and aft bilge pumps. These lights indicate when the bilge pumps are running. To port of these lights is the **Rudder Angle Indicator**. This indicator shows the current position of the boat's rudders. "0" indicates the rudders are in straight ahead position. If the indicator is in the "red" area of the gauge, the rudders are turned to the port side of the boat. If the indicator is in the "green" area of the gauge, the rudders are turned to the starboard side of the boat.

Located inside the console are two groups of audible alarms, one for the port engine and one for the starboard engine. These alarms will sound for each of the following:

- ⚓ **High Temperature Alarm** - Engine's cooling temperature exceeds 210 ° F.
- ⚓ **Low Oil Alarm** - Engine oil pressure drops below 5 PSI.
- ⚓ **Low Volts Alarm** - Battery voltage falls below 11.5 V.

1 . 1 . 4 . Switch and Breaker Panels

To port and starboard of the steering wheel, inboard of the clutch and throttle controls, are the two helm switch panels (see Figure 1-5). These panels contain the following switches:

- ⚓ **Blower** - An ON-OFF switch that, when switched ON, activates the bilge exhaust blowers.

- ⚓ **Horn** - A momentary switch which, when pressed, blows the boat's horn.
- ⚓ **Mid Bilge Pump** - An OFF-ON switch that, when switched on, activates the mid bilge pump located in the engine room.
- ⚓ **Aft Bilge Pump** - Same as forward bilge pump only for the aft bilge pump, located under the large cockpit hatch.



The Federal Water Pollution Control Act prohibits the discharge of oil or oily waste into or upon the navigable waters of the United States or the waters of the Contiguous Zone if such discharge causes a film or sheen upon or a discoloration of the surface of the water or causes a sludge or emulsion beneath the surface of the water. Violators are subject to a penalty of \$5,000.

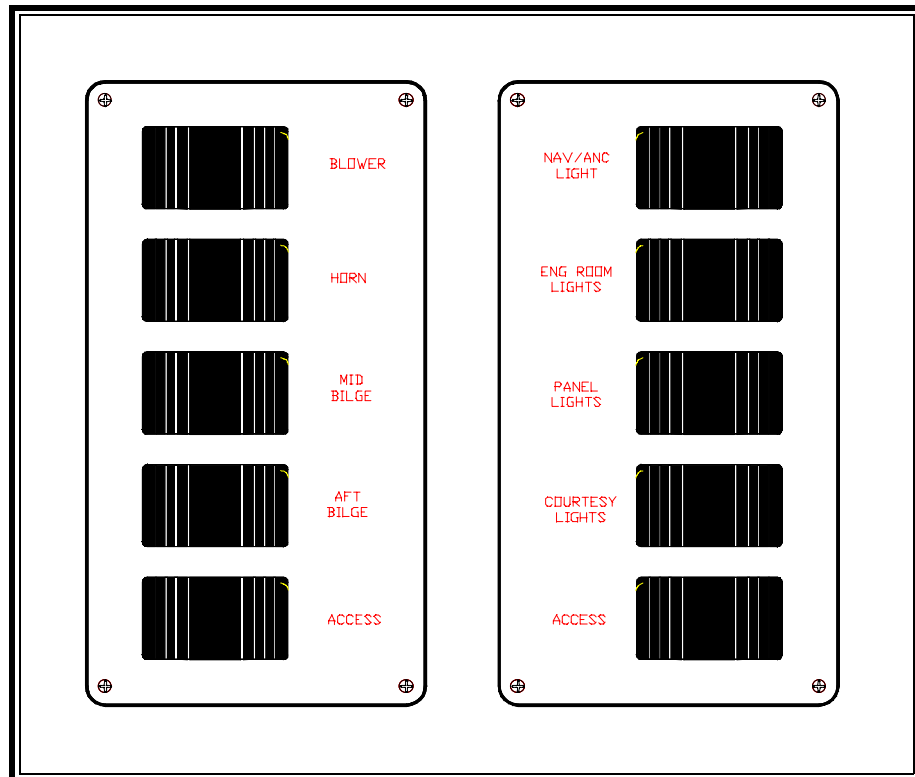


Figure 1-5: Helm Switch Panels

- ⚓ **NAV/ANC Lights** - An ON-OFF-ON switch that when switched to one ON position, lights the bow red and green lights, the forward white light in the mast light atop the wind shield, and the white stern light on the transom. This position is used when operating your boat at night or when visibility is reduced due to weather. The other ON position lights only the forward and aft white lights in the mast light atop the wind shield. This position is to be used when your boat is anchored at night.
- ⚓ **Engine Room Lights** - An OFF-ON switch that, when switched ON, activates the engine room lights to improve visibility in the engine room.
- ⚓ **Panel Lights** - An ON-OFF-ON (bright-OFF-dim) switch that, when switched ON, activates lights in the helm gauge panel and switch panel for use at night.
- ⚓ **Courtesy Lights** - An OFF-ON switch that, when switched ON, activates lights located under the port and starboard covering boards and under the optional cruising radar arch. These lights make moving about the cockpit easier at night.
- ⚓ **Access.** - Two locations for switches that are provided for later installed accessories.

In the aft face of the console, to starboard, is the helm breaker panel (see Figure 1-6). This panel contains the circuit breakers for all circuits switched by switches in the helm switch panel, the ignition switches, battery parallel switch, and the trim tabs. The sizes of the breakers are:

- ⚓ **25A** Blower
- ⚓ **20A** Hatch lifter
- ⚓ **15A** Trim tabs, mid/aft bilge pumps
- ⚓ **10A** Port/starboard ignition
- ⚓ **5A** Horn, battery parallel, navigation/anchor lights, courtesy lights, panel lights, engine room lights

All breakers are covered with a waterproof boot for their protection. In the event a breaker is tripped, investigate possible

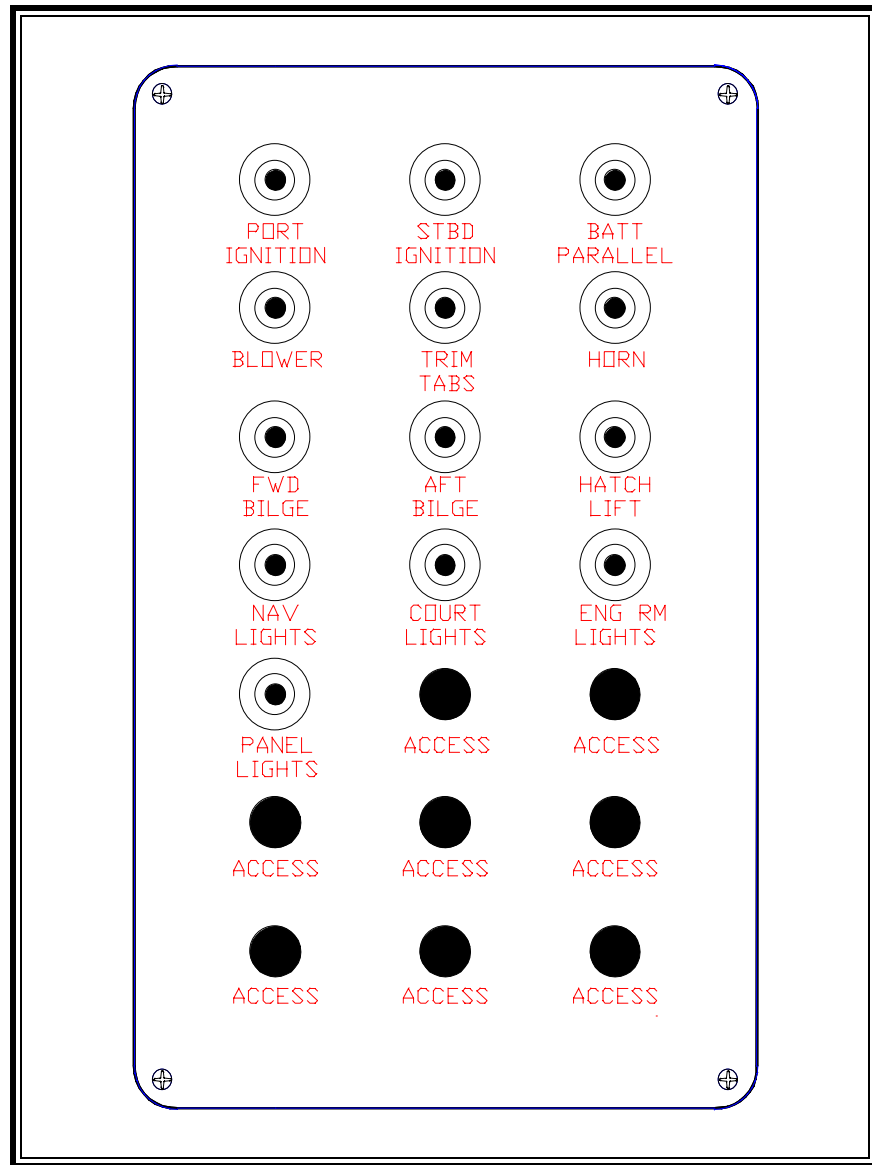


Figure 1-6: Helm Breaker Panel

causes for circuit overload and then reset by pressing in on the center of breaker.

1 . 1 . 5 . Trim Tabs

In the aft face of the console, just below the steering wheel, to starboard, are the trim tab rocker switches (see Figure 1-7). These switches control the operation of the port and starboard

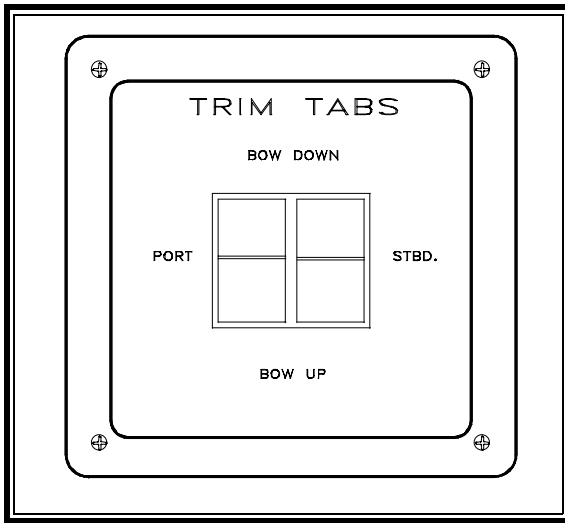


Figure 1-7: Trim Tab Switches



Figure 1-8: Compass

trim tabs located in the transom, at the boat bottom. The trim tabs can control the fore and aft "trim" and port and starboard "heel" of your boat while it is on plane.

To lower the starboard bow, press the starboard switch at the top. To raise the starboard bow, press the starboard switch at the bottom. The same works for the port bow up and down.

Note: Pressing the starboard switch at the top to lower the starboard bow will actually activate the port trim tab to go down. The same works for the port tab.



When backing your boat at more than idle speed (such as during fishing) press both switches at the bottom to fully retract tabs. Failure to do so could result in damage to trim tab hydraulic cylinders.

1.1.6. Equipment Controls

At the top of the console is the compass (see Figure 1-8). A compass indicates the direction the bow of your boat is headed. The compass in your **PURSUIT** 3000 should be compensated by your **PURSUIT** dealer, or other qualified marine service

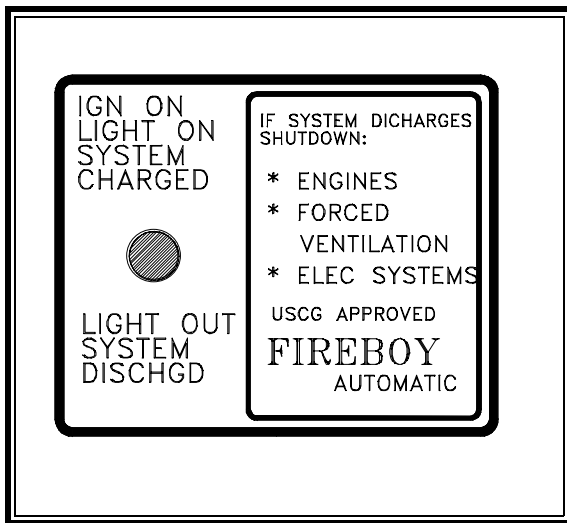


Figure 1-9: Fire System Monitor

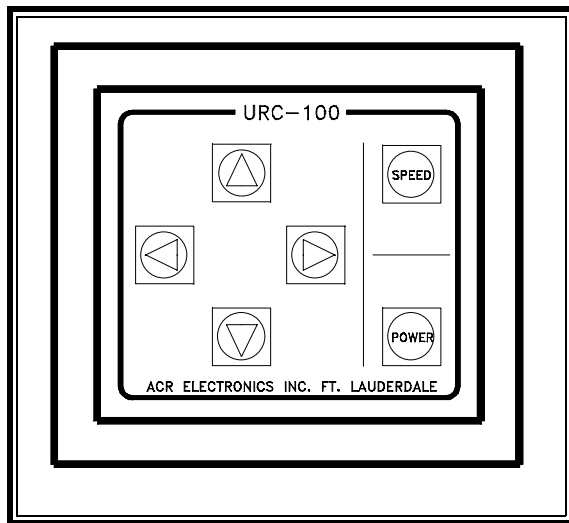


Figure 1-10: Search Light Control

facility, for magnetic variance associated with operating your boat in your particular location.

Below the ignition switches is the fire system indicator light (see Figure 1-9 for fire system monitor). For specific information on how the fire system works, refer to the owner's manual provided by the fire system manufacturer.



IF A FIRE SHOULD OCCUR, TURN OFF ALL MAIN ELECTRICAL SWITCHES AND SHUT DOWN THE GENERATOR. DO NOT OPEN THE ENGINE ACCESS HATCH OR LARGE ENGINE HATCH. ALLOW THE CHEMICAL TO SOAK THE ENGINE COMPARTMENT FOR AT LEAST FIFTEEN (15) MINUTES.



FIRE FIGHTING CHEMICALS, SMOKE FROM A FIRE, AND ENGINE EXHAUST DURING A FIRE GIVE OFF TOXIC GASES AND CAN CAUSE ASPHYXIATION OR OTHER SERIOUS HEALTH PROBLEMS. IF A FIRE SHOULD OCCUR, OR THE SYSTEM BE ACCIDENTALLY DISCHARGED, GET OUT INTO FRESH AIR. DO NOT BREATHE THE FUMES.

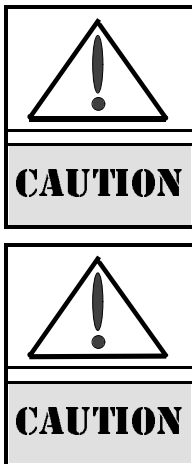
The optional remote search light control is located to starboard of the steering wheel, in the console face (see Figure 1-10). For specific operating instructions, refer to the information provided by the equipment manufacturer.

At the bottom edge of the console, a footrest has been installed for your comfort when sitting down and running your boat.

The area below the engine gauges has been left blank for installation of electronics of your choice, available at your local **PURSUIT** dealer.

1.1.7. Miscellaneous

On the port and starboard sides of the console, beside the engine gauges, are two round knobs that secure the console from hinging aft. By unscrewing these two knobs, it allows the console to be hinged aft, at the top, for access to the back side of all console electrical equipment, electronics, engine controls, steering system pump, and engine instrumentation.



Console must be securely fastened in the forward position while operating the boat. Failure to do so may result in unexpected movement of the console.

All repairs to items in your *PURSUIT* 3000 console should be serviced by a marine electrician or mechanic. Failure to do so could result in damage to equipment or difficulty in safely operating the boat.

Located in the cabin side, both port and starboard, are double drink holders. Additional single drink holders are also located port and starboard, aft of the helm seat, in the bait station.

The cockpit speakers for the optional AM/FM/cassette stereo are located aft of the drink holders, in the cabin side. The optional venturi windscreen is situated on the forward edge of the cabin.



1 - 11 : Chart Stowage

To port of the console is a convenient chart storage area, covered by a clear Plexiglas cover (see Figure 1-11). A handrail is also provided for passenger security while seated and standing.

1 . 1 . 8 . Companionway Door

The companionway door and hatch on your **PURSUIT** 3000 Offshore Express (see Figure 1-12) is operated as follows:

To open:

1. Unlock the latch on the upper edge of the bi-fold door with the key provided.
2. Hinge the aft section of the hatch forward.
3. Hinge the forward section of the hatch up. The hatch is held open by two gas shocks.
4. Release the door latch at the bottom.



1 - 12 : Companionway Door and Hatch

5. Fold the door to starboard. Secure open with a snap that holds the two halves together and a strap, with snap, located inside the starboard drink holder.

To close, reverse the procedure.

Note: To secure the hatch from the inside, use the same key latch that is operable from the inside without the key.

1 . 1 . 9 . Seating

Three forward facing pedestal seats are provided standard (see Figure 1-13). One of these seats is located on centerline, for the helm station, with a footrest located on the aft face of the console. The other two seats are situated to port with a footrest on the aft face of the cabin bulkhead, and to starboard just aft of the companionway door with a footrest located just below and forward of the seat pedestal.

Two additional seats are provided just aft of the port and starboard pedestal seats. The seat bottom cushions for these seats are located on the seat boxes and the back rest cushions are on the inboard faces of the cabin sides.

Storage is provided under the seat bottoms of these inboard facing seats via access hatches that are hinged on the forward edges. To port is a large dry storage area and to starboard is a smaller wet storage area with a drain. On the inboard face of the starboard seat box is a tackle box storage area behind a hinged door with push button/latch and key lock.

1 . 1 . 10 . Engine Hatch

Just aft of the helm pedestal seat is the engine room access hatch. To raise the large engine hatch, an electric engine hatch lifter has been installed. The hatch is hinged along the forward edge by four hinges. The aft end is lifted and lowered by electric actuators that are controlled by a rocker switch in the cockpit. This switch is located on the starboard side, above the cockpit step.



Be certain that all loose items are removed from the engine hatch and hatch gutter before lifting or closing. Do not stand on the hatch during operation.

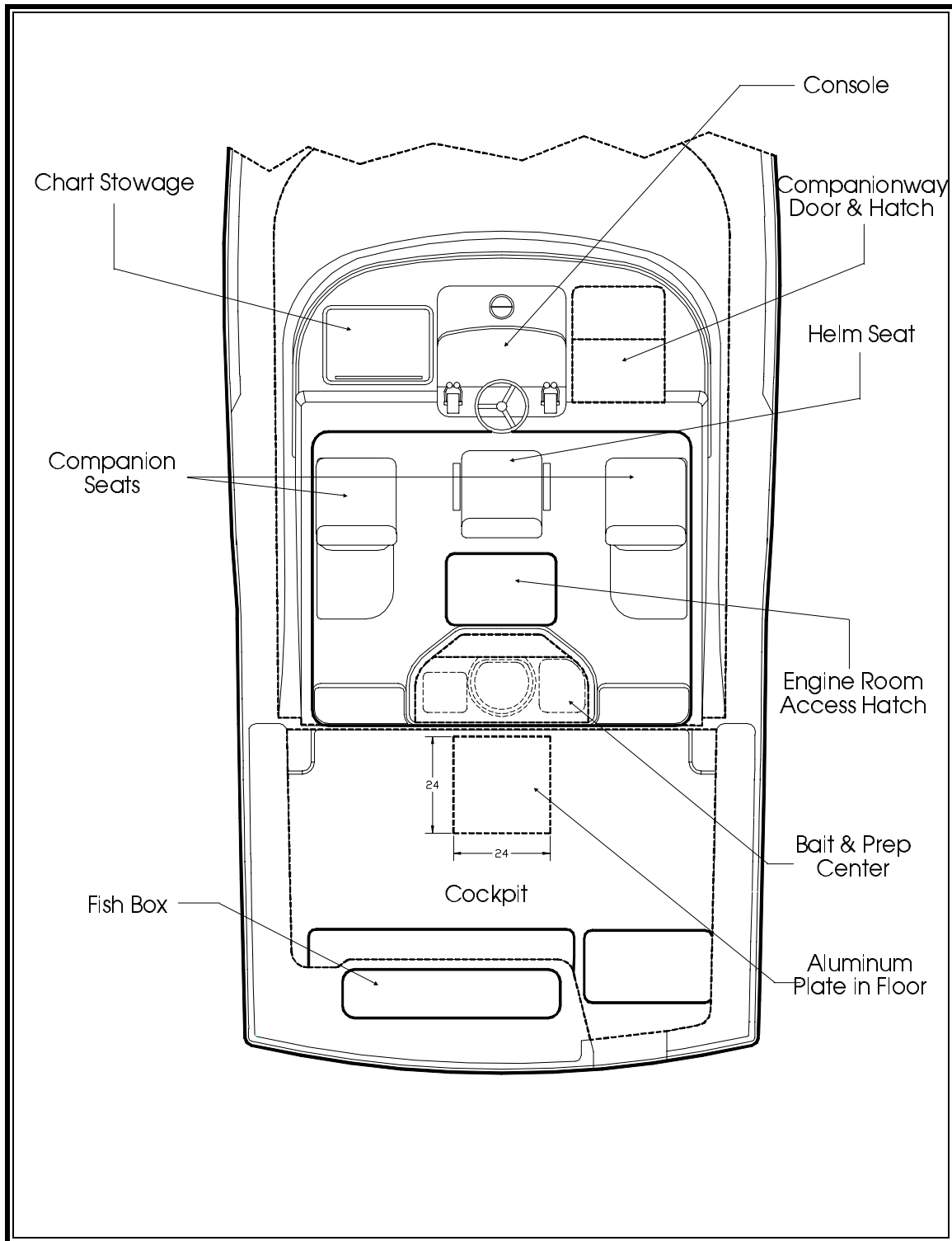


Figure 1-13: Cockpit and Seating Arrangement

1 . 1 . 11 . Engine Room

Located in the center of the engine room floor, under a small grate, is the bilge. Two sets of batteries and battery boxes are found both forward and aft. On centerline, forward of the forward set of batteries, just below the forward engine room bulkhead, is the water heater.

Located on the forward engine room bulkhead are the fresh water system pump, the battery charger and the engine electrical system isolator. Also located on this bulkhead, outboard, to port, is the head vent blower.

Port and starboard, at the aft end of the plenums, are the engine room exhaust blowers. On the aft engine room bulkhead, behind each engine, in the hull bottom, are the engine raw water pick-ups. The strainer is also located on the back bulkhead. Outboard of the strainer are the electric engine hatch lifts. Also on the aft engine room bulkhead, behind the port engine, is the fire extinguishing system bottle. Mounted in the hull bottom, behind the port engine, is the head system water intake. Located to starboard is the raw water washdown inlet. The raw water washdown pump is located on the aft engine room bulkhead outboard of the hatch lifts. The baitwell pump inlet is also in the hull bottom, aft of the starboard engine. The baitwell pump is mounted on top of the inboard stringer. There is an access plate with a T-handle located underneath the prep center sink area for access to the plumbing under the sink.

1 . 1 . 12 . Cockpit Prep Center/Bait Station

At the aft end of the engine hatch is the cockpit prep center/bait station (see Figure 1-14). A sink with a spray nozzle and drain are located beneath the starboard access hatch, and a baitwell with a circulating system and cutting board are located beneath the top access hatch to port.

The cover over the sink hinges to port and the cover over the baitwell hinges forward and is supported in the open position by a support stay. To close this hatch, simply lift the hatch to the extent of the support stay a second time and then hinge closed.



1 - 14 : Cockpit Prep Center

The switch for the baitwell circulating pump is located on the aft face of the prep center unit. Also in the aft face of the prep center, to port, is another tackle tray/storage box behind a hinged door with push button/latch and key lock.

The top of the prep center, forward of the lids, are two drink holders. Steps leading from the cockpit to the helm area are located both port and starboard of the prep center. Additional drink holders are located port and starboard of the steps, in the inboard face of the cabin sides.

1 . 2 . COCKPIT AREA

For ease in boarding your boat from the dock, and returning to the dock from the cockpit, fixed cockpit steps have been provided port and starboard at the forward end of the cockpit.



Figure 1-15: Shore Power Inlet

In the aft face of the starboard cockpit step is the 110V shore power inlet and fuse. The fuse is there to protect your boat's wiring between the power inlet and the A.C. panel in the cabin (see Figure 1-15). Above the step is a 110V A.C. GFI outlet with a weatherproof cover.

In the aft face of the port cockpit step is the optional cockpit shower unit.

1 . 2 . 1 . 110V Shore Power

How to hook up to shore power:

1. Turn A.C. main breaker(s) in boat cabin to OFF.
2. Turn breaker on cord power supply to OFF.
3. Plug power cable into boat inlet;
 - a. Unscrew cover over inlet,

- b. Plug in shore power cable and twist to lock,
- c. Tighten locking ring onto inlet fitting.
4. Plug cord into dock receptacle and twist to lock.
5. Turn on dock breaker.
6. Turn A.C. selector switch to "dockside".
7. Check polarity light on boat A.C. main panel.

IMPORTANT NOTE: If light is red, **STOP**. Do **NOT** put boat A.C. main breaker in the ON position. Investigate cause immediately. If light is green, put the boat A.C. main breaker in the ON position.

To disconnect shore power:

1. Turn off boat A.C. main breaker.
2. Turn A.C. selector switch to "OFF".
3. Turn off dock breaker.
4. Disconnect shore power cord from dock outlet.
5. Disconnect shore power cord from boat inlet and replace cover.
6. Stow shore power cord.



TO REDUCE THE RISK OF ELECTROCUTION AND OTHER INJURY FROM ELECTRICAL SHOCK, DO NOT MAKE UNNECESSARY CONNECTIONS IN WET WEATHER, WITH WET HANDS, OR WITH WET CABLES AND CONNECTIONS. ALWAYS USE A 3-WIRE ELECTRICAL SYSTEM CONNECTED TO A GROUND. DO NOT USE WORN OR DAMAGED CABLES.



Figure 1-16: Dockside Water Inlet



When routing electric cables and dockside water hose from boat to dock, be sure to allow sufficient slack so that as boat moves within its slip, the cables are not strained in any way.

1 . 2 . 2 . Dockside Water

Above the port cockpit step, in the aft face, is the optional dockside fresh water inlet with regulator (see Figure 1-16). When a hose from the dock is attached with pressure, your boat's fresh water system is using water from the dock, not from the onboard fresh water tank.

Note: When using dockside water, the water pressure pump breaker on the A.C. / D.C. main panel should be switched OFF.

1 . 2 . 3 . Covering Boards

On the port and starboard covering boards are the four rod holders, two port and two starboard. In the aft corners are the hawse pipes which lead dock lines down to the two mooring cleats. Below the cleats are the cockpit scuppers.

The optional fresh water washdown faucet is located under the port coaming board. The optional raw water washdown is located under the starboard covering board.

Cockpit coaming bolsters are provided port and starboard for your comfort. Courtesy lights have been installed underneath the covering boards for your safety and convenience.

1 . 2 . 4 . Transom Fish Box

Across the transom of your 3000 Offshore Express near boat centerline is a large fish box. The fish box is accessed by two hatches on the top that each hinge inboard. A convenient drain is provided in the bottom of the box which drains overboard.

1 . 2 . 5 . Transom Door and Gate

To starboard, in the transom, are the transom door and gate. The gate is secured down by a latch, on the underside, at the starboard end. The door is held shut by a latch on the inboard face.



DO NOT OPERATE YOUR *PURSUIT* UNDER POWER WITH THE TRANSOM DOOR OR GATE OPEN. OPERATION OF BOAT WITH TRANSOM DOOR AND GATE MAY ALLOW PERSONS TO FALL OVERBOARD AND INTO BOAT PROPELLERS OR TO BE LOST IN OPEN WATER.

1 . 2 . 6 . Cockpit Floor

At the aft end of the cockpit floor are two hatches, one large to port and one small to starboard. Beneath these hatches is access

to the engine mufflers, steering gear, trim tab pump, strut back-up plates, aft bilge pump with float switch, garboard drain, and optional air conditioning unit, raw water pump and strainer. The large hatch is held shut by a T-handle and hinged on the aft face. This hatch is held in the open position by a prop on the underside of the hatch, outboard. Under normal operating conditions, the small hatch is secured down by four screws and is accessible for maintenance purposes only.

In the cockpit floor are three access plates with latches to access the top of the fuel tank. Below the centerline access plate is the fuel tank gauge sender and the two return fuel fittings and hoses. The forward plates access the fuel fill, vent fittings and fuel withdrawals.

Additional access plates (screw type) are provided port and starboard, in the cockpit sides, for access to the back sides of the fuel vents.

1 . 2 . 7 . Hardtop

Standard on your 3000 Offshore Express is a fiberglass hardtop supported by an aluminum tubular frame. On the underside of the hardtop, port and starboard, are lights which are activated by the courtesy lights switch on the helm switch panel. Additionally, ON/OFF switches are located on the lights themselves in order to operate them independently of each other.

A canvas enclosure is provided to protect the helm area from the weather. Optionally, a marlin tower is available above the fiberglass hardtop.

1 . 3 . SIDE DECKS

In the side decks, at the aft end of the cabin sides, is the fuel fill to starboard, and the waste tank pump-out and optional auxiliary fuel fill, to port. The waste pump-out has a green plug in the fitting. As you continue forward on the side decks, towards the foredeck, you will find a spring line cleat on both sides, as well as the fresh water fill on the starboard side near the companion-way door. A grill on the starboard cabin side covers the horn. A

cowl vent at the aft end of the port and starboard cabin sides is installed as part of the engine room ventilation system.

1 . 4 . FOREDECK

On the foredeck of your **PURSUIT** 3000 Offshore Express you will find three cabin ventilation hatches, the rope locker hawse pipe into the rope locker for the anchor rope, a hatch into the anchor locker, two mooring cleats, red and green running lights, and the bow rail (see Figure 1-17).

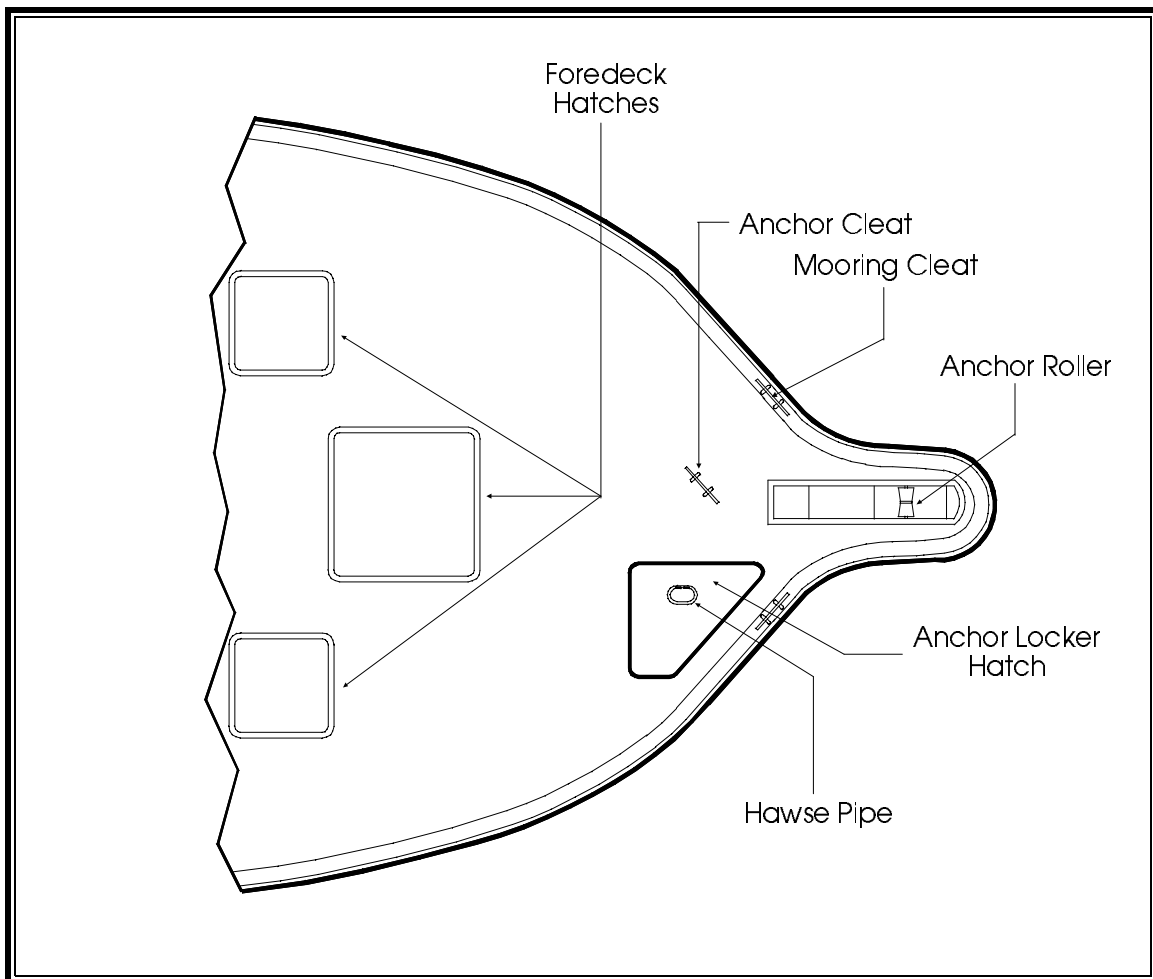


Figure 1-17: Cabin Top and Foredeck



THE CLEATS ON THE BOW AND STERN OF YOUR BOAT HAVE NOT BEEN DESIGNED FOR, AND ARE NOT INTENDED TO BE USED FOR TOWING. USING THEM FOR THIS PURPOSE COULD RESULT IN PERSONAL INJURY AND DAMAGE TO YOUR BOAT AND OTHERS.

Available optionally is an anchor roller in the bow pulpit, as well as an anchor cleat.

1 . 5 . HULL SIDES AND TRANSOM

The port and starboard hull sides each have engine room vent recesses, near midships, engine exhausts near the transom, and a number of vents (see Figure 1-18) and thru-hulls. See Figures 1-19 and 1-20 for identification of each one.

Located on the transom of your **PURSUIT** 3000 Offshore Express is the white stern light, recessed trim tabs, and two zinc plates (see Section 5.4.6).



DO NOT SWIM AROUND BOAT WITH ENGINES RUNNING, PROPELLERS MAY TURN AND CAUSE SEVERE PERSONAL INJURY EVEN WITH ENGINES IN NEUTRAL.



Figure 1-18: Vent Fitting

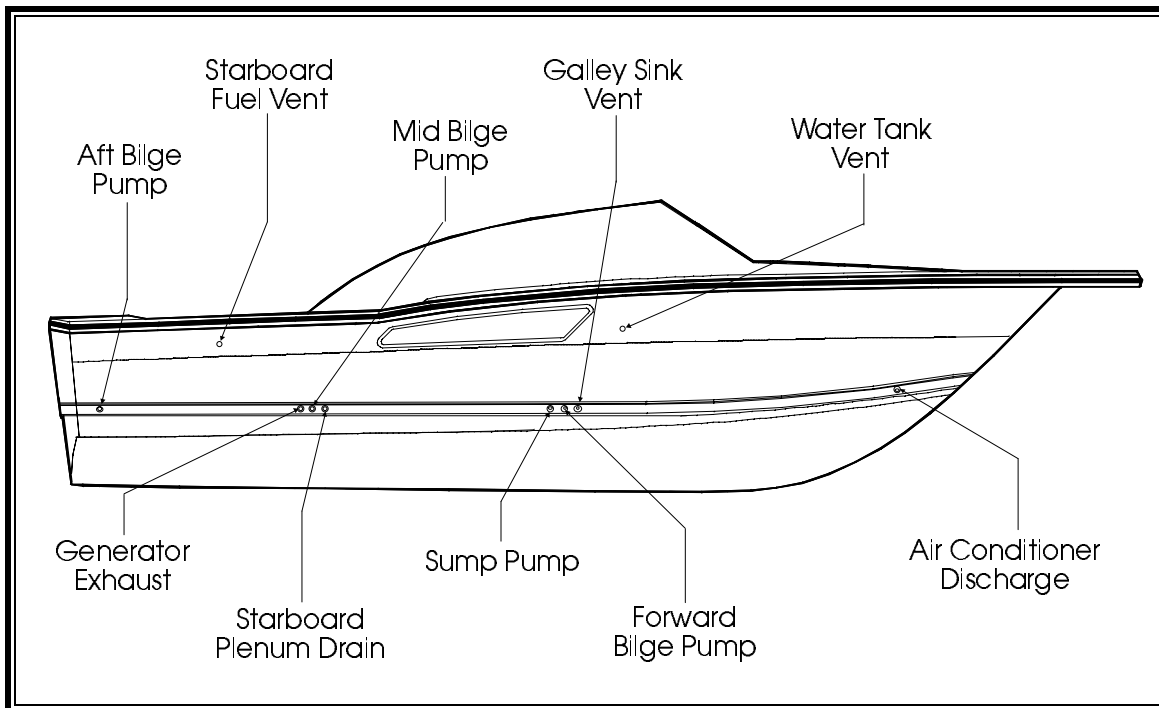


Figure 1-19: Starboard Hull Side

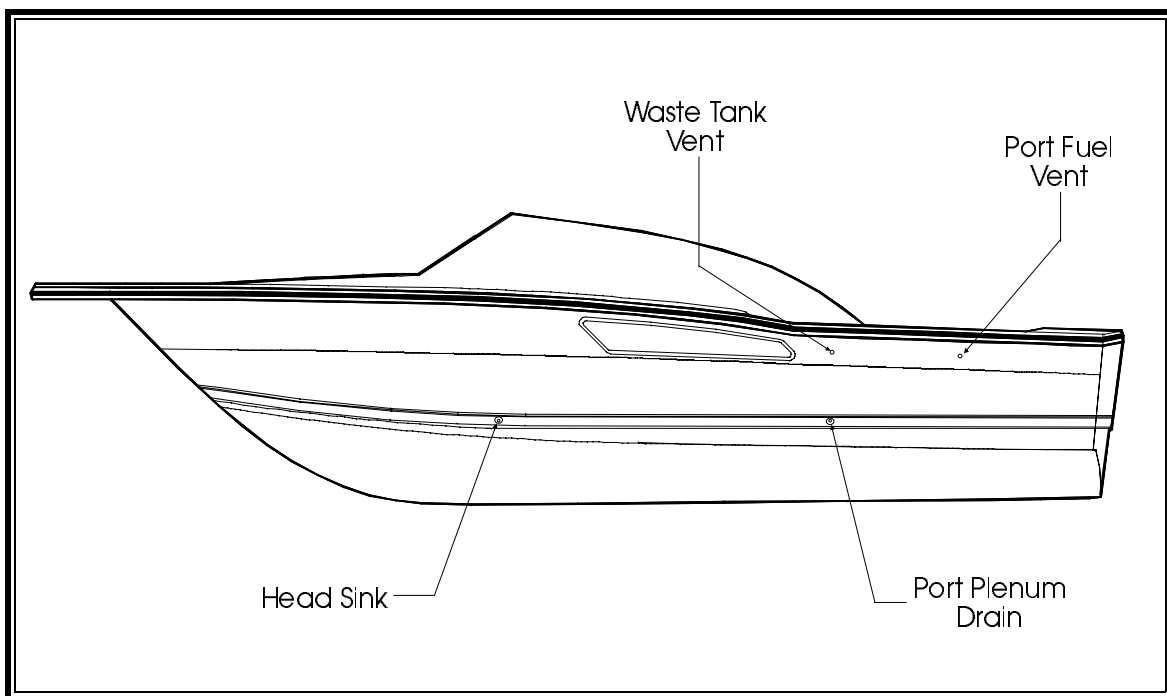


Figure 1-20: Port Hull Side

This page intentionally left blank.

Chapter 2

INTERIOR EQUIPMENT AND FEATURES

2 . 1 . FORWARD BERTH AND PORT SIDE LOUNGE

Your **PURSUIT** 3000 Offshore Express features considerable storage in the forward berth and port side lounge. Storage in the forward berth is provided via a hatch underneath the forward berth cushion. To access this storage area, simply lift the cushion out. Storage is also located at the aft end of the forward berth. This area provides rod storage for rods stored athwartships and additional storage at the port and starboard ends. To access, lift the back edge of the forward berth cushion and, using the hand hole that has been provided, raise the access hatch which is hinged along the forward edge.

There is a large drawer underneath the berth top, in the aft face of the forward berth, that is held shut by a push/pull latch. To operate this latch:

1. Push in flush to lock.
2. Push in again to unlock and provide a pull handle.
3. Pull handle to open drawer or door.

NOTE: The table has to be in the lower most position and stowed over the starboard lounge in order to open and close the drawer.

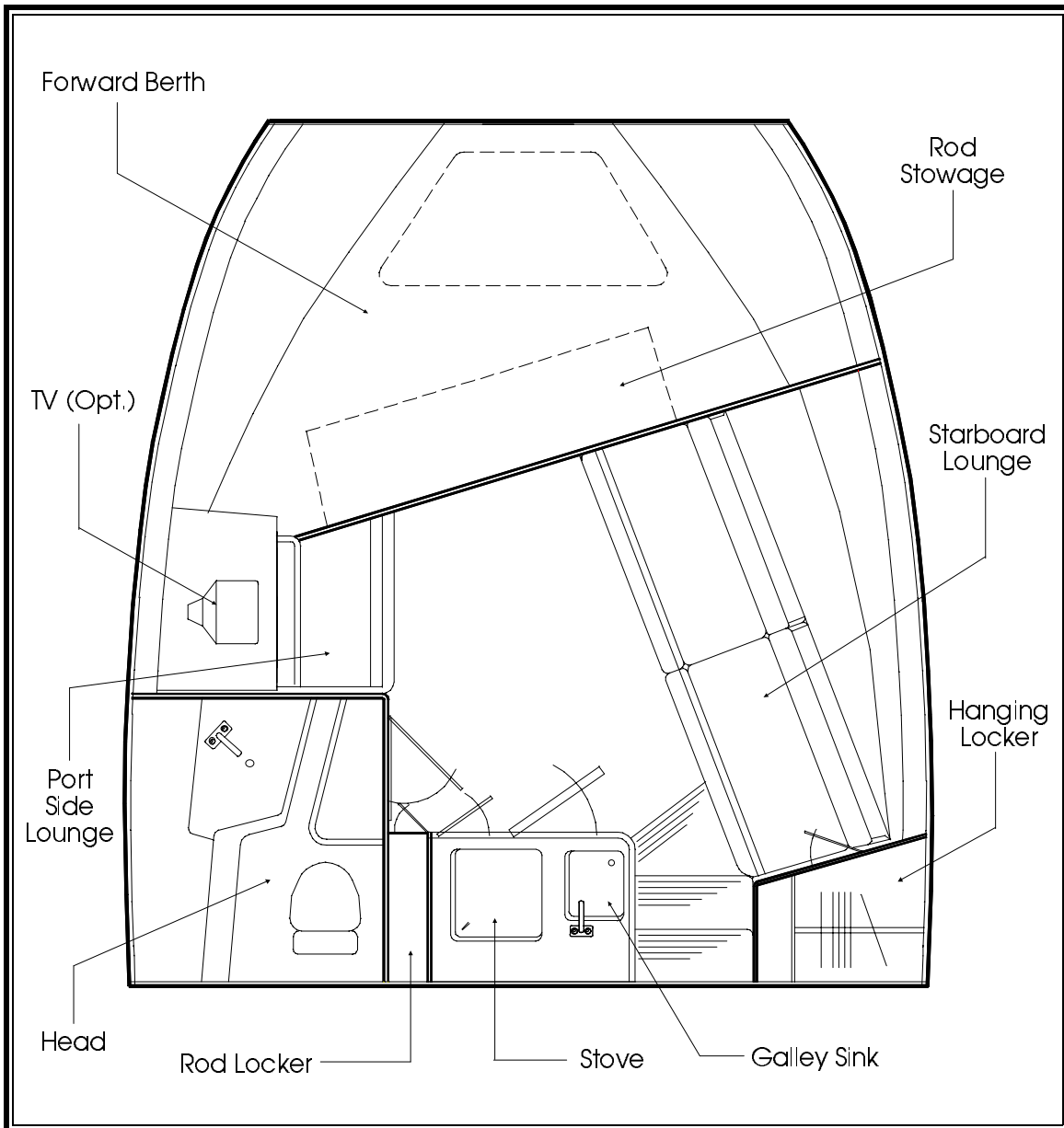


Figure 2-1: Inboard Plan View

The return grill for the optional air conditioning system is located in the aft face of the forward berth, below the drawer.

Additional storage has been provided underneath the bottom seat cushion of the port side lounge, beneath an access hatch. There is also storage behind the seat back cushion that is accessible by removing the cushion. Above this lounge, behind

a pair of hinged doors, which are each held closed by a push/pull latch, is another storage area. A storage shelf is located above, and includes the optional air conditioning discharge grill. The optional TV is located on this storage shelf.

Ventilation and natural lighting are provided by one large escape hatch and one smaller ventilation hatch, both equipped with removable screens, overhead. Artificial lighting comes from lighting behind the valences, port and starboard, and a bullet light on the front face of the starboard forward berth bulkhead, as well as on the forward face of the forward head bulkhead above the port side lounge.

Switches for the bullet lights are located on the lights themselves. The switch for the indirect lighting behind the valences is located on the forward face of the storage area, above the port lounge. The optional air conditioning control panel is also located in this area (see Figure 2-2). Portside, outboard of the port side lounge, on top of the storage shelf, is a 110 V duplex A.C. outlet.

One of the speakers for the optional AM/FM stereo is located to port, on the forward face of the upper storage locker. Please read the owner's manual, included in your owner's packet, from the stereo manufacturer.

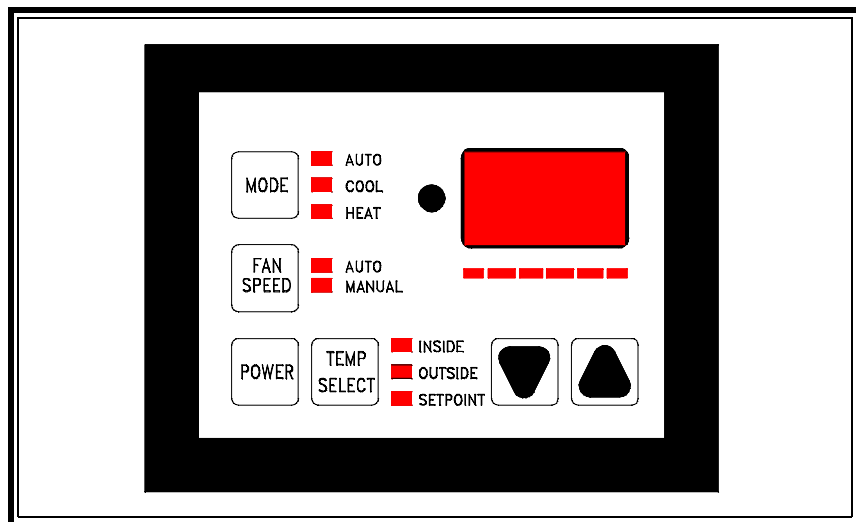


Figure 2-2: Air Conditioning Control Panel

2 . 2 . HEAD

The head in your **PURSUIT** 3000 Offshore Express is located to port, aft of the port lounge area. It is accessed through a door, hinged aft, and opening into the cabin area. It features include a marine toilet, sink with hot/cold fresh water faucet, a telephone shower, and a mirror. When using the shower, a shower curtain which runs on an overhead track has been provided. A drain is located in the floor beneath a plastic grating and runs to a shower sump. The shower sump is operated automatically by a float switch, in the sump, and requires no other switch to operate.

Storage is provided under the counter top, accessed by a door in the vanity face, under the sink. A toilet paper holder is provided on the back side of the access door. A large storage area with two keepers located on the front edge, has been provided outboard of the head, and a small shelf, with keeper, located above the sink. A towel bar / handrail has been installed on the aft head bulkhead, about shoulder high.

Artificial lighting is created by an overhead light, operated by a switch on the vertical face of the vanity, above the sink. Additional lighting has been provided above the sink, under the side deck and is operated by a switch on the light itself. A 110 V GFI outlet is also provided outboard, above the sink. Artificial ventilation is provided via a powered head vent. The intake grill for the vent's blower is in the vertical face of the vanity, below the countertop. The switch to operate the blower is located next to the inlet grill.

The marine toilet is covered by a seat that is hinged on the inboard edge. This seat cover is held in the up position by a strap located on its underside. The marine toilet is available in a variety of options. Please read the owner's manual from the head system manufacturer included in your owner's packet, and reference schematics of the various systems provided in Section 5.7 of this manual. The head system that was installed by **PURSUIT** is listed under the boat specific section of Appendix A.

2 . 3 . ROD LOCKER

Located to port, outboard of the galley, is a lighted rod locker. The locker is accessed by a hinged plexiglass door. The door is held closed by a latch on the upper, outboard corner that can be released by reaching your finger over the top of the door. The switch to operate the overhead lighting in the rod locker is located on the forward face of the galley, beneath the counter-top.

2 . 4 . GALLEY

The galley in your **PURSUIT** 3000 Offshore Express is equipped with an A.C. / D.C. refrigerator, with freezer, in the forward face, a one burner electric cook top recessed into the fiberglass counter top, and a microwave in the upper locker, near the overhead. The refrigerator is held closed by a latch in the top of the door that must be opened to access. There is also a sink with a hot and cold fresh water faucet recessed into the counter top.

The one burner electric cook top is located behind a removable cover.



Do not close the countertop range cover until the burners are cool. Failure to do so could result in damage to the cover, range, or both.



DO NOT ALLOW WATER TO OVERFLOW FROM THE SINK INTO THE STOVE RECESS. THIS MAY CAUSE AN ELECTRICAL FIRE OR ELECTROCUTION.

Storage in the galley area comes from a drawer and a hinged door beneath the countertop, to port of the refrigerator, both of which are held closed by a push/pull latch. Storage is also available to port of the microwave, in the upper locker. The upper locker door is also held closed by a push/pull latch.

Behind the hinged storage door, beneath the drawer, in the forward face of the galley, is a hatch in the floor. This hatch allows access to the bilge, the shower sump and the forward automatic bilge pump.

Lighting in the galley is provided by a fluorescent light on the underside of the upper locker. The switch for this light is located on the forward face of the galley, beneath the countertop. Also on the forward face of the galley, beneath the countertop, is a 110 V GFI outlet, a light switch to operate the overhead lighting in the rod locker, and a towel bar / handrail.

2 . 5 . STARBOARD LOUNGE

The starboard lounge area in your **PURSUIT** 3000 Offshore Express is located across from the head area. Its features include an adjustable table, seating that converts to an upper and lower berth, as well as considerable storage.

To convert to an upper and lower berth:

1. Lift up the berth back rest to a horizontal position.
2. Unsnap the support straps from the underside of the back rest and hook into the two padeyes, one located aft in the overhead, and the other located forward on the aft face of the aft forward berth bulkhead.

To close, reverse the procedure.

Rod stowage is provided, in this area, under the seat bottom cushion, beneath a large access hatch that is hinged outboard. Additional storage is located outboard of the seat back cushion, in its folded down position, behind a vinyl cover. The cover is held in place with snaps. At the aft end of the lounge area, behind a hinged door, is a hanging locker. The locker door is held closed by a push/pull latch. The second speaker for the optional AM/FM stereo is located outboard of the hanging locker door.

Natural lighting and ventilation is provided by a small overhead ventilation hatch, with screen. Artificial lighting is provided by lights behind the valences, outboard, as well as by bullet lights located on the aft face of the forward bulkhead, and the forward

face of the aft bulkhead. Switches for the bullet lights are located on the lights themselves. The switch for the indirect lighting behind the valences is located on the forward face of the galley.

2 . 5 . 1 . Table

The table that has been provided in your **PURSUIT** 3000 may be adjusted in many ways. The table may be adjustable vertically; the arm that holds the table top may swing in a complete circle; and the table top itself may also rotate in a circle, on top of the arm. Each of these parts of the table are held in position by an adjustable tension lever.

2 . 6 . COMPANIONWAY

2 . 6 . 1 . Battery Switches

The steps leading into the cabin area of your **PURSUIT** 3000 Offshore Express contain several items. Accessed under the top step are the battery D.C. main switches. There is a switch for both the port and starboard batteries and a third switch to provide power from the house battery. All switches have been labeled as to their application.

2 . 6 . 2 . D.C. Main Breaker Panel

To starboard of the battery switches is a breaker panel for a number of circuits in your boat that are not routed through the main D.C. panel (see Figure 2-3). These circuits, and their corresponding breaker sizes, are as follows:

- ⚓ **D.C. Main (60A)** - This breaker protects the electrical circuit from the starboard battery to the main D.C. panel.
- ⚓ **Helm Main (30A)** - This breaker protects the electrical circuit from the starboard battery to the helm main switch on the D.C. main breaker panel.
- ⚓ **Fwd Bilge Pump (5A)** - Supplies electrical current to the bilge pump located in the forward bilge, under the companionway steps. This bilge pump has a built in automatic switch.

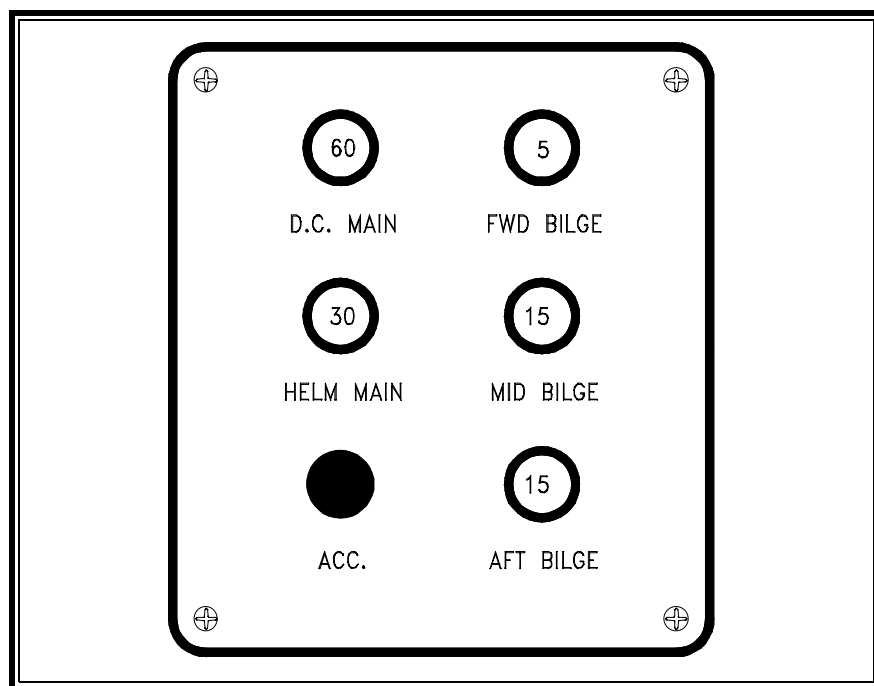


Figure 2-3: D.C. Main Breaker Panel

Note: The forward bilge pump senses the presence of water by activating every several minutes, and stopping if no water is detected. If the noise is distracting while sleeping, the breaker can be pulled out to turn the pump off. When leaving the boat, the switch should be left in the "ON" (in) position.

- ⚓ **Mid Bilge (15A)** - This breaker protects the circuit from the port battery to the mid bilge pump and float switch. This ensures that when you leave your boat and turn off the D.C. main switches, your mid bilge pump, located in the engine room, is still protecting your boat.
- ⚓ **Aft Bilge (15A)** - Same as the mid bilge, but for the bilge pump located in the aft bilge, at the transom.
- ⚓ **Acc.** - These spots are provided for installation of breakers to protect any circuits you decide to install that require a routing other than through the main D.C. panel.

The middle step is fixed and beneath the lower step is a small storage area.

As you come down the companionway, to starboard, is the optional AM/FM cassette stereo. Installed below the stereo are the waste / water tank monitor (see Figure 2-4) and two light switches. One switch operates the courtesy lights on the starboard side of the galley. These lights shine onto the steps as you enter the boat for your safety and convenience. The second switch operates the overhead dome light. Below this handrail is the A.C. / D.C. main distribution panel. To port, as you go down the companionway, is a handrail for assistance in going up and down the stairs.

2.6.3. Generator Panels

If your **PURSUIT** 3000 Offshore Express has a factory installed generator option, there are two additional panels that are located on the aft cabin bulkhead, to starboard of the companionway steps. They are the generator start panel and the A.C. source selector (see Figures 2-5 and 2-6).

For instructions on starting the generator, please refer to the generator manufacturer's owner's manual provided in your information packet.

The A.C. source selector is provided to select which source of A.C. power will feed the A.C. main distribution panel (see

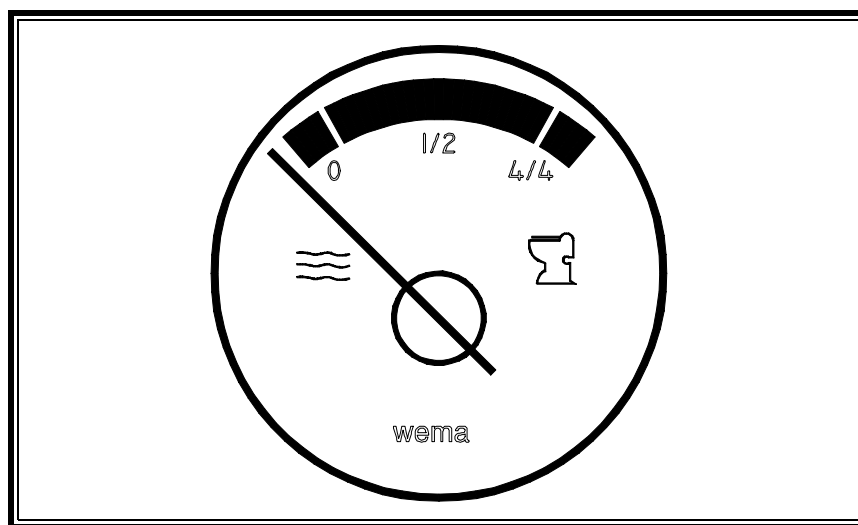


Figure 2-4: Waste / Water Tank Monitor

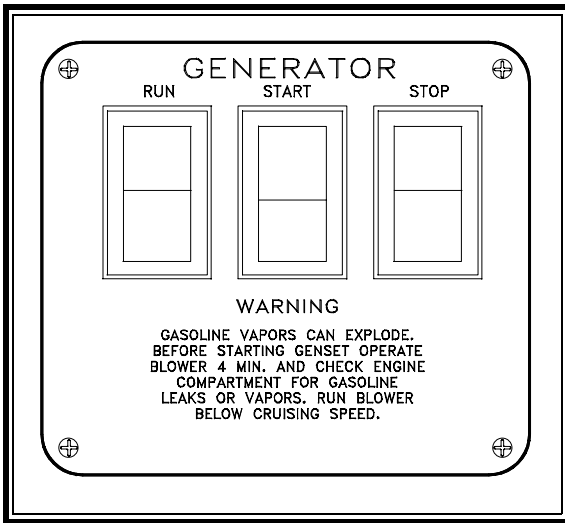


Figure 2-5: Generator Start Panel

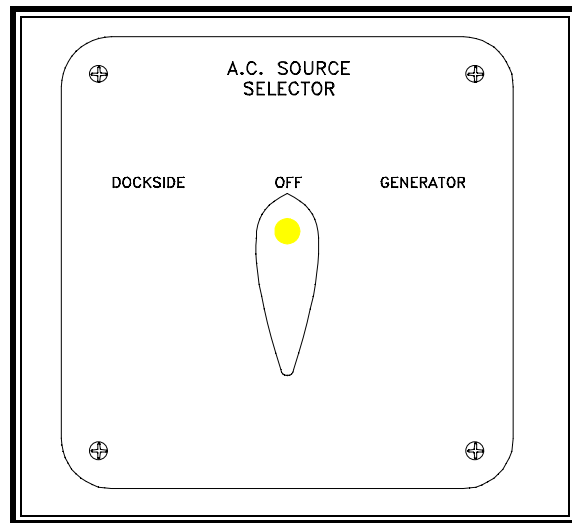


Figure 2-6: A.C. Source Selector Panel

section 2.7.2, 110V

A.C.), the shore power connection, or the installed generator.

2.7. A.C. / D.C. MAIN DISTRIBUTION PANEL

The A.C. / D.C. main distribution panel is located to starboard, as you come down the companionway, below the handrail (see Figure 2-7). This panel controls most of the electrical circuits on your boat. By breaker, they operate as follows:

2.7.1. 12 V D.C.

- ⚓ **D.C. Volt Meter** - Indicates the amount of voltage in the battery that is selected by the battery test switch.
- ⚓ **Battery Test Switch** - Indicates starboard, port and house batteries.
- ⚓ **D.C. Main** - Supplies electrical current to the D.C. main panel from the D.C. main breaker panel located under the companionway steps, with the exception of the helm main breaker.
- ⚓ **Cabin Lights Forward** - Supplies electrical current to the lights behind the forward valences, the head, and the

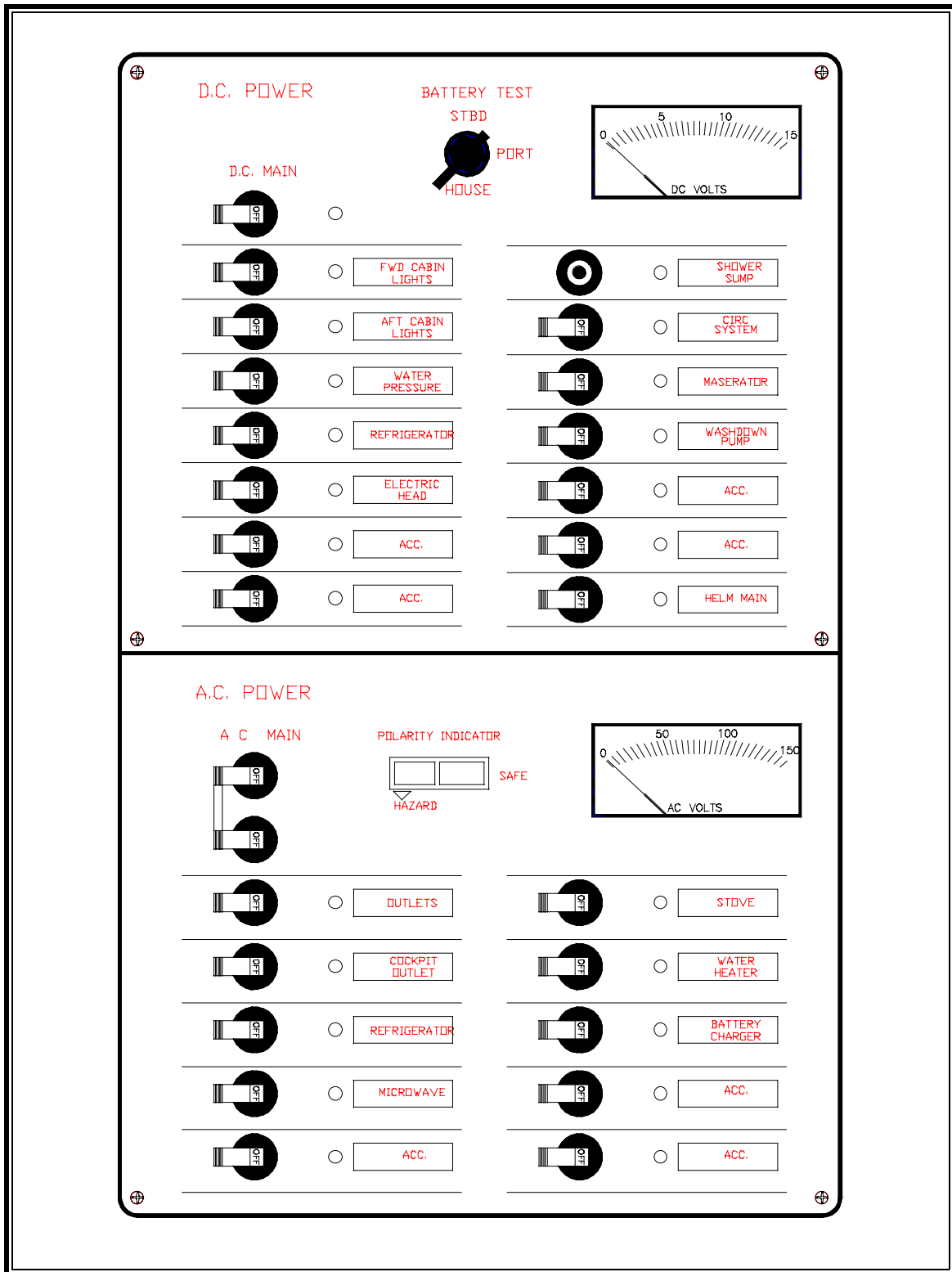


Figure 2-7: A.C. / D.C. Distribution Panel

bullet light on the port side of the boat above the port lounge.

- ⚓ **Cabin Lights Aft** - Supplies electrical current to the galley, the starboard lounge, and the bullet lights on the starboard side of the boat.
- ⚓ **Water Pressure** - Supplies electrical current to the fresh water system pump.
- ⚓ **Refrigerator** - Supplies electrical current to the 12 V D.C. circuit of the installed refrigerator. If the A.C. panel is energized, the A.C. refrigerator breaker is ON, and this breaker is switched to ON, the refrigerator will operate on A.C. current.
- ⚓ **Electric Head** - Supplies electrical current to the optionally installed head, if it requires electrical current to operate.
- ⚓ **Head Vent** - Supplies electrical current to the head vent blower.
- ⚓ **Shower Sump** - A "push-to-reset" breaker that feeds electrical current to the shower sump. The shower sump is turned on and off by a float switch located in the shower sump.
- ⚓ **Baitwell Pump** - Supplies electrical current to the baitwell pump located in the bait and tackle prep center.
- ⚓ **Macerator** - Supplies electrical current to the optional head system macerator pump.
- ⚓ **Washdown Pump** - Supplies electrical current to the optional raw water washdown pump.
- ⚓ **Helm Main** - Supplies electrical current to the helm breaker panel. This switch operates independent of the D.C. main breaker switch on this panel and is supplied current from the helm main breaker, located under the cockpit steps.

A number of other locations are provided for installation of other breakers and switches to be used for owner installed items.



ADDITIONAL WIRING OR REPAIR OF EXISTING WIRING SHOULD ONLY BE PERFORMED BY A QUALIFIED MARINE ELECTRICIAN. IMPROPER WIRING CAN CAUSE ELECTROCUTION AND FIRES IN BOAT WIRING.

2.7.2. 110 V A.C.

- ⚓ **A.C. Volt Meter** - Indicates the voltage being supplied by the shore power line, or optional generator, determined by which is selected on the A.C. selector switch next to the companionway steps (only with generator option).
- ⚓ **A.C. Main** - Supplies electrical current to the A.C. main panel from shore power, or optional generator, determined by which is selected on the A.C. selector switch next to the companionway steps (only with generator option).
- ⚓ **Polarity Indicator** - Indicates if the shore power hooked up has the correct polarity. Incorrect polarity is indicated by a red light, correct polarity by a green light.



DO NOT OPERATE THE A.C. ELECTRICAL SYSTEM FROM SHORE POWER WITH INCORRECT POLARITY. INCORRECT POLARITY WILL DAMAGE THE SYSTEM, EXPOSE PASSENGERS TO ELECTROCUTION HAZARDS, AND POSSIBLY CAUSE A FIRE IN THE BOAT ELECTRICAL SYSTEM.

- ⚓ **Outlets** - Supplies electrical current to all 110 V A.C. outlets located in the cabin and optional cockpit wet bar seating.
- ⚓ **Cockpit Outlet** - Supplies electrical current to the 110 V GFI A.C. outlet located above the starboard cockpit step.
- ⚓ **Refrigerator*** - Supplies electrical current to the 110 V A.C. circuit of the installed refrigerator. If the D.C. panel

is energized, the D.C. refrigerator breaker is ON, and this breaker is switched to ON, the refrigerator will operate on A.C. current.

- ⚓ **Microwave*** - Supplies electrical current to the installed microwave in the galley.
- ⚓ **Stove*** - Supplies electrical current to the installed electric stove in the galley.
- ⚓ **Water Heater*** - Supplies electrical current to the fresh water system water heater.

Note: Water is also heated by a heat exchanger connected to the starboard engine. For hot water without using the 110 V power supply, run the starboard engine until it reaches normal operating temperature and allow a short time for the fresh water to heat up.



DO NOT OPERATE THE WATER HEATER WITHOUT WATER IN THE SYSTEM, AND THE WATER HEATER FULL OF WATER.

- ⚓ **Battery Charger*** - Supplies electrical current to the installed 20 amp battery charger that will charge the installed batteries from shore power or generator.
- ⚓ **Air Conditioning*** - Supplies electrical current to the optional air conditioning system and control panel.

*Owner's manuals for these appliances supplied with your Owner's Packet.

Locations for additional breakers are provided for owner installed items.



ADDITIONAL WIRING OR REPAIR OF EXISTING WIRING SHOULD ONLY BE PERFORMED BY A QUALIFIED MARINE ELECTRICIAN. IMPROPER WIRING CAN CAUSE ELECTROCUTION AND FIRES IN BOAT WIRING.

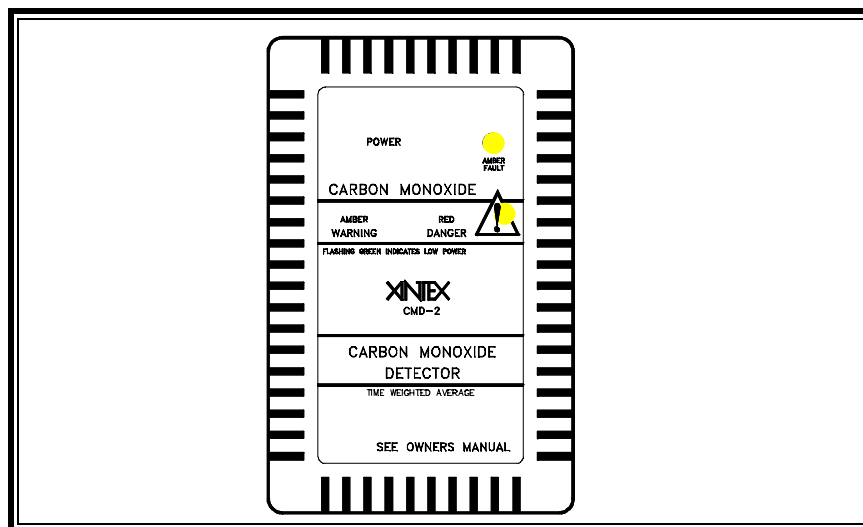


Figure 2-8: CO Detector

2 . 7 . 3 . Carbon Monoxide Monitoring System



THE CARBON MONOXIDE MONITORING SYSTEM IS ONLY A SUPPLEMENTAL SAFETY AID. MAKE SURE YOU FOLLOW ALL SAFETY PROCEDURES GIVEN IN THIS MANUAL. CARBON MONOXIDE IS A LETHAL, TOXIC GAS THAT WILL CAUSE DEATH IN CERTAIN LEVELS.

The carbon monoxide monitor is located on the forward face of the upper port locker (see Figure 2-8). If excess carbon monoxide fumes are detected, an audible beeping will sound indicating the presence of the toxic gas.

Please read the owner's manual supplied by the detector manufacturer for operation instructions and additional information regarding the hazards of carbon monoxide gas.

This page intentionally left blank.

Chapter 3

OPERATING YOUR BOAT

3 . 1 . WHEN ARRIVING AT YOUR BOAT

When you arrive at your boat to take a trip, the first thing you should do is go below and turn on the 12V D.C. main battery switches (under the steps) and the necessary A.C. and D.C. breakers on the main distribution panel (on the aft dinette bulkhead). This will allow you to operate any equipment you might need. While at the D.C. main panel, check the condition of your batteries with the test switch and the D.C. voltmeter. If the battery(s) reads below 10 volts, investigate the D.C. system for the cause.

The second thing that you should do is check the bilge areas of your boat, forward, aft, and in the engine room for unexpected water or debris. While doing this, it's a good time to check and open any seacocks for equipment that may have been shut off when you last left your boat. While in the engine room, you should check the engine oil, engine coolant, transmission oil, and generator oil and coolant, if one is installed. Also, smell for any gas fumes or other unusual smells and investigate if detected.

While at the helm area, check to see that all equipment is functioning by testing each one with its switch.

3 . 1 . 1 . Shore Power / Shore Water

Please refer to Section 1.2.1. for how to hook up and disconnect shore power and Section 1.2.2. for how to hook up and disconnect the shore water.

3 . 1 . 2 . Fueling Your Boat



FUEL IS EXTREMELY FLAMMABLE. NO SMOKING. NEVER FILL THE TANK WHILE THE ENGINES, BLOWERS, GENERATOR, OR OTHER EQUIPMENT IS OPERATING. DO NOT FILL NEAR OPEN FLAMES.

The fuel fill is located to starboard, just forward of the aft end of the windshield, in the side deck (see Figure 3-1). To fill the fuel tank follow this procedure:

1. Turn off all switches on the A.C. / D.C. main panel so that any equipment that can make sparks can not run.
2. If your boat is equipped with a generator, make sure the generator switch is in the OFF position.
3. Make sure that your boat is securely moored.



Figure 3-1: Fuel Fill

4. Have all passengers leave the boat.
5. Estimate how much fuel is needed.
6. Using the special key provided for this purpose, insert the key into the slot in the fuel fill, turn the key counterclockwise, and remove the cap.



BE SURE THAT THE FUEL FILL IS IN CONTACT WITH THE FUEL NOZZLE TO PREVENT ANY STATIC SPARKS DURING THE FUELING OPERATION.



To prevent damage to your fuel system, use only a good grade of fuel as recommended by the engine manufacturer. Do not use a fuel which contains harsh additives or alcohol. Damage done to your fuel system as a result of using these fuels will not be covered by your warranty.

7. Insert the fuel nozzle into the fuel fill and dispense the fuel until the tank is full. Verify that the tank is full by reading the fuel gauge and/or by the sound of the fuel fill port. If your tank takes significantly more fuel than expected, investigate the cause immediately.



BE CAREFUL TO NOT SPILL ANY FUEL ON THE BOAT. IF YOU DO, BE SURE TO CLEAN UP ANY SPILLED FUEL IMMEDIATELY WITH A DISPOSABLE CLOTH.

8. Remove the nozzle and replace the fuel fill cap. Tighten securely with the provided key.



MAKE SURE THAT ALL HATCHES TO THE FUEL COMPARTMENT ARE OPEN FOR A MINIMUM OF FIVE MINUTES, AND THAT YOU OPERATE THE BILGE BLOWERS FOR A MINIMUM OF FOUR MINUTES, BEFORE THE ENGINES ARE STARTED, OR ANY OTHER ELECTRICAL EQUIPMENT IS USED.

9. Open all ports, hatches and doors.

10. Put the switch for the blowers in the ON position. The switch is located on the helm switch panel.



TO REDUCE THE RISK OF FIRE AND/OR EXPLOSION, INVESTIGATE ALL FUEL ODORS IMMEDIATELY AND DO NOT START THE ENGINES, OR OTHER ELECTRICAL EQUIPMENT, OTHER THAN THE BLOWERS. FUEL FUMES ARE DANGEROUS, HAZARDOUS TO YOUR HEALTH, AND COULD CAUSE SERIOUS INJURY OR DEATH.

11. Check the engine room and bilge areas for fuel odors. If you smell fuel, do not start the engines or other electrical equipment. Investigate the cause, correct, and completely ventilate the bilge area before proceeding.

3 . 1 . 3 . Starting Your Engines

Before starting your engines, be sure that you have performed all the maintenance checks listed under Section 3.1, *When Arriving at Your Boat*. To start your engines, follow these steps:

1. Open all hatches to the bilge area and operate the blower for at least four minutes. Investigate and remedy any fuel vapors that are detected.



DO NOT START THE ENGINES UNTIL YOU ARE SURE THERE ARE NO FUEL FUMES IN THE BILGE, OR ENGINE COMPARTMENT, OF YOUR BOAT. FUEL VAPORS ARE EXPLOSIVE AND MAY IGNITE DURING ENGINE START-UP CAUSING SERIOUS INJURY OR DEATH.

2. Make sure that the engine clutch levers are in the neutral position, straight up and down.
3. For cold gas engines, push the throttle levers forward and back three times, (except for fuel injected engines where this is not required). Then push the throttle levers to the 1/4 open position. For diesels, no throttle pumping is required, and keep the levers at the idle position.

4. Insert the keys into the ignition switches.

Note: When the ignition system is activated, the engine alarm will sound for a short period.

5. Turn the key clockwise to the START position and release when the engine starts. If the battery for that engine is low on voltage, press and hold the battery parallel switch, between the ignition switches, during the cranking operation. Please refer to Section 1.1.2. *Engine Controls* for specifics on the ignition switches.
6. Let the engines run at idle several minutes to fully distribute the oil inside, before leaving the slip.
7. The volt meter should read between 11 and 14.5 volts. If the reading is below 11, or above 14.5, stop the engines and investigate the cause before proceeding. Be sure the engines are operating properly as indicated by the gauges, before leaving the slip.

Note: Check your engine manufacturer's owner's manual for normal operating oil pressures and temperatures.

3 . 1 . 4 . *Starting the Generator*

If your boat is equipped with an optional generator, check the generator manufacturer's owner's manual for starting instructions. The generator control panel and the A.C. selector switch is located to starboard of the companionway steps.



THE SAME PRECAUTIONS REGARDING FUEL VAPORS FOLLOWED DURING MAIN ENGINE START-UP SHOULD BE TAKEN WHEN STARTING YOUR GENERATOR.

Note: The fuel pickup for the generator is not installed in the center of the fuel tank. Consequently, you are not able to operate the generator with the tank less than 1/4 full of fuel (approx.).

3 . 2 . LEAVING AND RETURNING TO THE DOCK

Before leaving on a short cruise or an extended trip, you should leave information regarding your trip with someone who will be staying ashore. Particularly information regarding who is aboard, where you intend to cruise, and when you plan to return. This information will be extremely valuable should you run into trouble while away from the dock.

Before you cast off, be certain that you have planned your trip so that you know when to expect to need fuel and where you will purchase it. Marinas are not always as convenient as gas stations in your car! You should also do a last minute double check to see that all necessary safety items are on board, especially a coast guard approved life vest, of the proper size, for everyone on board.

Specific procedures as to the maneuvers needed to leave the dock and return to the dock smoothly vary with each situation. Information on the best procedures can be found in "Chapman's" (see Glossary), and through safe boating classes offered in your area, through the Coast Guard Auxiliary and the Power Squadron. For information on the courses offered in your area, call the "Boating Course Hotline" at 1-800-336-2628.

Note: Refer to Section 1.1.2 for specific information on your engine controls.



While maneuvering around the dock, have all guests on board remain in the cockpit, or cabin areas, if they are not involved in the handling of mooring lines.

3 . 3 . WHILE UNDERWAY

As the skipper of your boat, everyone on board is your responsibility. Their safety and enjoyment of the trip depends on your ability to operate your boat properly. You must stay aware of the weather and sea conditions, surrounding boating traffic, navigation of area waters, and the condition of your boat and its equipment and engines.

When operating your boat at night, or when visibility is significantly reduced, you should display the proper running lights. For specific information on which lights and signals are needed for different conditions, refer to information in "Chapman's" or from the Coast Guard.

Remember:

1. Alcohol severely reduces the ability to react to several different signals at once.
2. Alcohol makes it difficult to correctly judge speed and distance, or track moving objects.
3. Alcohol reduces night vision and the ability to distinguish red from green.



DO NOT OPERATE YOUR BOAT WHILE UNDER THE INFLUENCE OF ALCOHOL. THIS MAY CAUSE SERIOUS PERSONAL INJURY, PROPERTY DAMAGE, AND/OR DEATH. *SMART SKIPPERS STAY SOBER!*



Figure 3-2: Anchor Windlass Foot Switch

3.3.1. Anchoring

Anchoring your boat while away from the dock is possible by using the anchor, anchor line, and cleat, provided for this purpose. The standard boat has an anchor locker accessed via a hawse pipe located in the foredeck, just aft of the bow pulpit. This locker is large enough to store all of the anchor line. The hawse pipe has a notch in it to allow the rope to pass through when the top is closed. The bow pulpit includes a bow anchor roller (see Figure 1-17, Chapter 1), where your anchor can stow while underway and can be used to lower and retrieve the anchor into/from the water. While in the stowed position, a short line, with a hook, has been provided to snug the anchor into the roller, from the cleat.

Specifics regarding the proper techniques, equipment, and conditions for safe anchoring, refer to "Chapman's", or a safe boating course.

If your boat is equipped with an optional anchor windlass, the switch to power the windlass is located next to it on the foredeck (see Figure 3-2). The main breaker is mounted under the companionway steps near the battery main switches. For operating instructions, refer to the windlass manufacturer's owner's manual.



WHEN OPERATING AN ELECTRIC WINDLASS, BE CAREFUL TO KEEP HANDS AND FEET AWAY FROM THE WINDLASS DURING OPERATION. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY WHEN THEY ARE TRAPPED BETWEEN THE WINDLASS AND ROPE OR CHAIN.

3 . 3 . 2 . Towing



THE CLEATS ON THE BOW AND STERN OF YOUR BOAT HAVE NOT BEEN DESIGNED FOR, AND ARE NOT INTENDED TO BE USED FOR TOWING. USING THEM FOR THIS PURPOSE COULD RESULT IN PERSONAL INJURY AND DAMAGE TO YOUR BOAT AND OTHERS.

If, while away from the dock, you find it necessary to have your boat towed by another boat, it should be done by a qualified marine towing service. Methods of securing a tow line to your boat that do not use the boat's cleats are described in "Chapman's" and are known by an experienced towing service. **Never** attempt to tow another boat with your boat.

3 . 4 . AFTER RETURNING TO THE DOCK

When you have returned to the dock, in order to maintain the finish and function of your boat, it is necessary to thoroughly wash it with a mild detergent soap and fresh water. After washing, in order to reduce spotting and maximize your boats appearance, dry all non-fiberglass surfaces with a dry towel or chamois.

When leaving your boat you should do the following:

1. Check the bilge areas for debris that might clog your bilge pumps while you are away.
2. Close all unnecessary seacocks.

3. Turn off all unnecessary electrical breakers.
4. Check to see that the bilge auto breakers are not tripped.
5. Check the security of all hatches and doors.
6. Check to see that both cockpit scuppers are clear and free to drain water from the cockpit.
7. Check to see that all mooring lines are secure and that your boat is properly positioned in the slip so as to not interfere with the dock during tidal changes and storms.
8. Check to see that shore power cords and dockside water hoses have sufficient slack, if left attached. Dockside water supplies should be turned off.

This page intentionally left blank.

Chapter 4

COMMISSIONING YOUR BOAT

4 . 1 . BEFORE LAUNCHING YOUR BOAT

The very first thing you should do when you get your new **PURSUIT** 3000 Offshore Express is **fill out the warranty registration card** and return it to the factory. This will make it easier to correspond with your dealer in the event of a problem with your boat. The following items are best accomplished by your **PURSUIT** dealer, or another qualified marine service facility. Your engine and transmission should be prepared according to the information provided from the engine manufacturer.

Before launching your boat for the first time the following items should be done:

4 . 1 . 1 . Bottom Paint

If your boat has come equipped with factory applied bottom paint, the second coat should be applied over the first, just before launching. The second coat is left off until this time so as to maximize the anti-fouling properties of the paint. Be sure that the bottom is clean and dry before applying the second coat. A gallon of paint has been provided by the factory for this purpose.

If your boat has not been ordered with factory applied bottom paint, and your boat will be kept in the water for an extended

period of time (three weeks or more), we recommend you have the bottom painted. When painting the bottom, we recommend that the paint system you use **not** involve sanding or abrading the gelcoat surface in any way. Your **PURSUIT** comes with a five year warranty against blistering that may be voided by breaking the gelcoat surface. Whatever the system you choose, we recommend that you follow the paint manufacturer's recommendations for preparation and application, and that you consider having your **PURSUIT** dealer, or other qualified marine service facility, apply the paint. Remember, never sand the gelcoat surface, use a primer type of paint system.

4 . 1 . 2 . Bilge Areas

Install the garboard drain plug (see Figure 4-1). The drain plug is located under the large cockpit floor hatch, near centerline, just forward of the aft bilge pump. Be sure that it is installed tight.

Close all seacocks.

4 . 1 . 3 . Electrical Systems

Check to see that the batteries are fully charged. If not, the batteries may be charged by hooking up the shore power cord

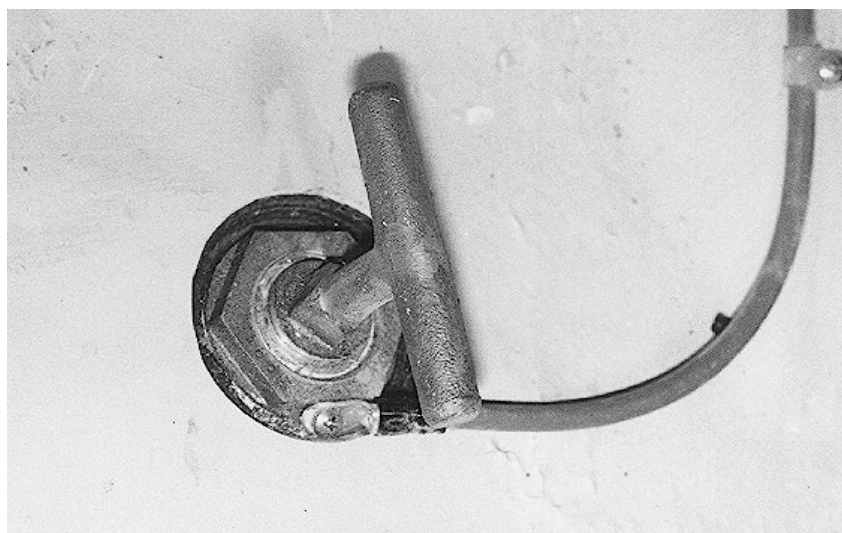


Figure 4-1: Garboard Drain Plug

(see Section 1.2.1) and switching on the installed battery charger (see Section 2.7.2).

4 . 1 . 4 . Installing the Propellers

To install the propellers (see Figure 4-2), the following procedure should be followed:

1. Check the keyway slot in both the propeller and the shaft for burrs, and make certain that the key will slide freely in the slots.
2. Slide the propeller onto the shaft, without the key in the slot, until it is fully engaged on the taper, and mark the forward face of the propeller on the shaft with a pencil.
3. Remove the propeller. Place the key in the propeller shaft keyway and again slide the propeller onto the shaft. Check to be sure that the propeller will still engage to the same place with the key in, as it did with the key out. If not, remove the propeller and key, and modify the key so that it will allow the propeller to fully engage on the shaft.



Do not install the propeller with a poorly fitted key in the keyway. A poorly fitting key may cause vibration underway, unexpected propeller shaft stress, and possible shaft failure.

4. After assuring the propeller, key, and shaft fit, remove the propeller and key, apply a lithium type grease to the shaft taper, place the key in the shaft keyway, and slide the propeller onto the shaft until it is fully engaged.

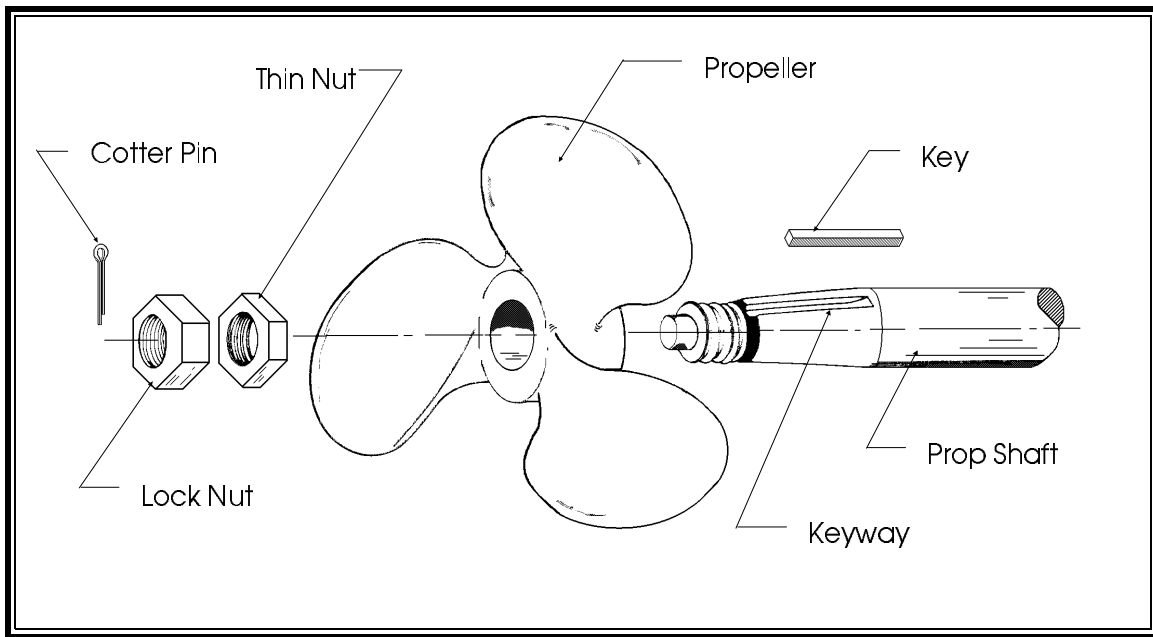


Figure 4-2: Propeller Installation



Do not allow the key to slide forward in the shaft keyway and ride up on the radius at the forward end of the shaft keyway. Failure to prevent this may cause unacceptable shaft stresses and possible shaft and/or propeller failure.

5. Thread the thin propeller nut onto the shaft threads and tighten against the propeller with a wrench, while holding the propeller from turning. Next, thread the thick propeller nut onto the shaft threads and tighten against the thin nut with a wrench, while holding the propeller from turning. Slide the cotter pin into the hole at the end of the shaft and spread both halves around and against the shaft.

Repeat for the other propeller.

Be sure that the propellers are installed on the correct shaft. If they are on the wrong shaft, the boat will move in reverse when shifted into forward.

4 . 2 . LIFTING YOUR BOAT

Now that your boat is ready to launch, it is necessary to lift it into the water with a marine hoist or travel lift. This should only be done by your **PURSUIT** dealer or a qualified marine service facility and personnel.

Lifting your boat should only be done with slings located where indicated by sling tags on the hull side, port and starboard (see Figure 4-3), and with the slings held at least the same beam as the boat with the hoist or spreader bars. Pads should be placed at the chine corners to ease the pressure while lifting.



Failure to follow the above procedures while lifting your boat may result in structural damage to the hull and deck or underwater gear.

4 . 3 . AFTER LAUNCHING YOUR BOAT

The first thing to check is the bilge area and all thru-hulls, seacocks, rudder shaft logs, and propeller shaft logs to be sure

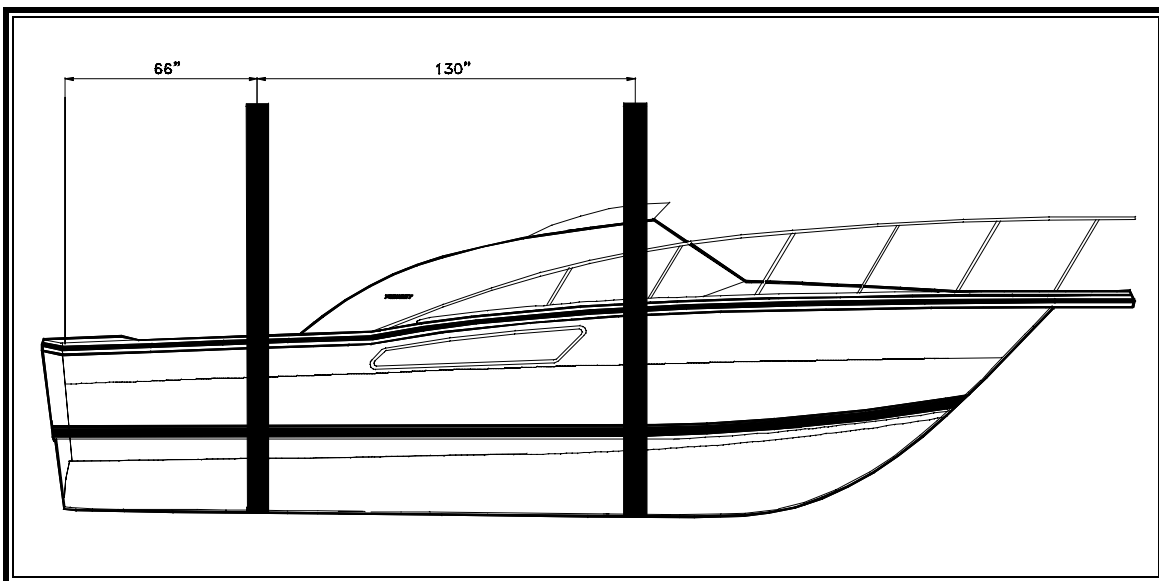


Figure 4-3: Sling Locations

they are not leaking. Open all seacocks and make certain that the hoses and fittings are not leaking.

4 . 3 . 1 . Fresh Water System

Prepare the fresh water system for operation. To prepare the system follow this procedure:

1. Turn on the fresh water pump.
2. Open both faucets at the galley sink.
3. When the pink potable water anti-freeze stops flowing from the faucets, turn off the faucets.
4. Turn off the fresh water pump.
5. Fill the fresh water tank with fresh water. The fill is located on the starboard side deck, near the helm area (see Figure 4-4). The tank should be filled until water runs out of the vent on the hull side, just below the fill.
6. Switch on the fresh water pump. Open all the faucets in

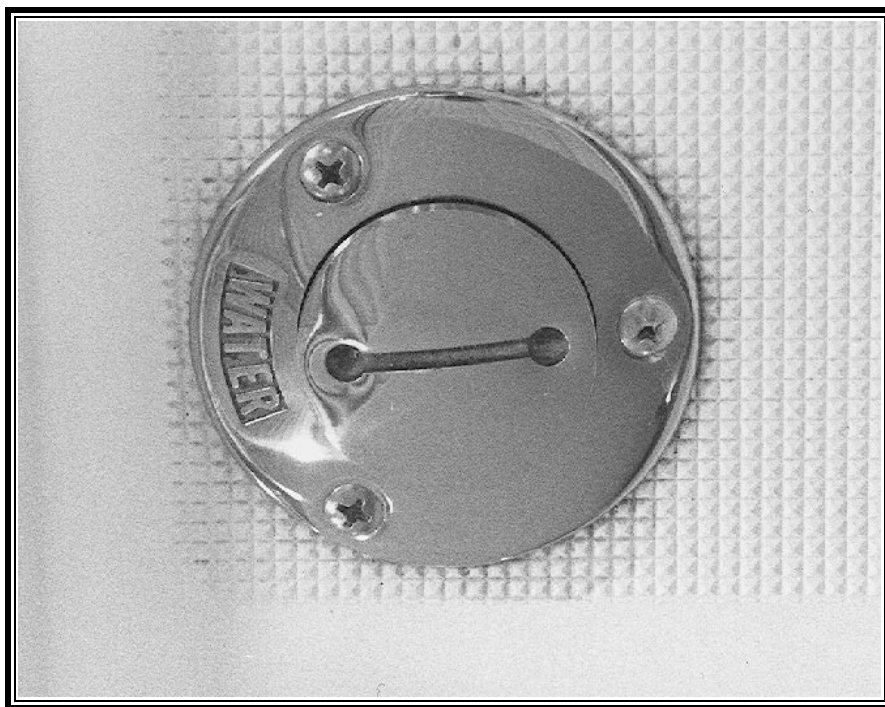


Figure 4-4: Water Fill

the galley, the head, and the fresh water washdown in the cockpit, if installed.

7. Leave all faucets open until the water tank is empty.
8. Turn off the fresh water pump and close all the faucets.
9. Fill the fresh water tank with clean water.
10. Turn on the pump and purge air from the system, at the faucets. The pump will shut off as the system pressure increases.

4 . 3 . 2 . Electrical Systems

Hook the shore power system up to a source of power and test all A.C. powered systems and circuits. Test all D.C. systems and circuits. Report all problems and questions to your **PURSUIT** dealer at once.



INVESTIGATION OF PROBLEMS WITH ELECTRICAL SYSTEMS AND CIRCUITS ON YOUR BOAT SHOULD ONLY BE DONE BY QUALIFIED MARINE ELECTRICAL REPAIR PERSONNEL. FAILURE TO DO SO CAN RESULT IN EQUIPMENT DAMAGE, FIRES IN BOAT WIRING, SEVERE ELECTRICAL SHOCK AND DEATH.

If installed, check the optional generator fluids. Start your generator and test all A.C. systems connected to the generator. Follow any start-up procedures recommended by the generator manufacturer in their owner's manual.

4 . 3 . 3 . Engines and Transmissions

The alignment between the transmission flange and propeller shaft flange must be checked before leaving the dock for the first time (see Figure 4-5). While this alignment is set before the boat leaves the factory, the boat may settle after shipment and then again when being put in the water. This must be checked and adjusted, if necessary, by your **PURSUIT** dealer or a qualified

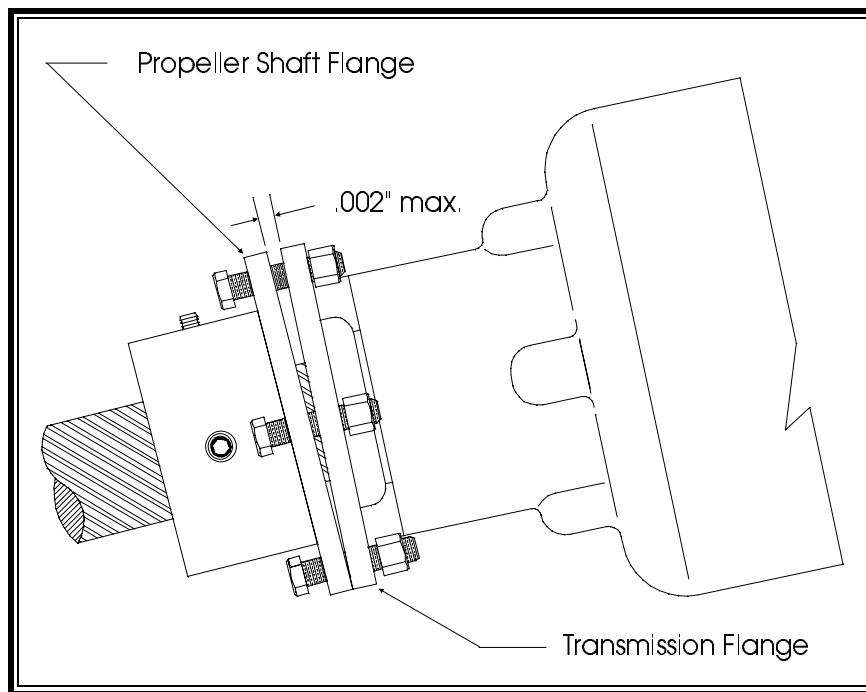


Figure 4-5: Propeller Shaft / Transmission Coupling

marine service facility. The alignment should also be checked seasonally.

The alignment should also be checked again at 25 hours, whenever the boat has been out of the water for an extended period, or at least once a year. If it is not within tolerances indicated in Figure 4-5, you must have it adjusted.

Check the engines and transmissions for proper oil and coolant fluid levels. Start your engines and check to see that they are operating properly. Check your engine manufacturer's owner's manual for any start-up and break-in procedures. See Section 3.1.3. for engine starting procedures.

4 . 3 . 4 . Interior Equipment

Operate the head system, per instructions in the information provided by the head manufacturer, to be certain that it is operating properly.

4 . 3 . 5 . Exterior Equipment

Set up any canvas and vinyl enclosures to be certain of their fitting properly. Clean and wax the boat (hullsides are best done before launch). Also be certain that your boat is secured in its slip properly. Report all problems that are encountered in the process to your ***PURSUIT*** dealer at once so that they may be taken care of promptly.

This page intentionally left blank.

Chapter 5

ROUTINE MAINTENANCE

The various systems and products that make up your **PURSUIT** 3000 Offshore Express will require routine maintenance from time to time and many will require scheduled maintenance. For information about maintaining the items purchased by the factory and included in your boat, refer to the various products' owner's manuals from their manufacturers.

5 . 1 . FUEL SYSTEM

The fuel system in your **PURSUIT** 3000 Offshore Express begins with a fuel tank located under the cockpit floor. This tank is filled via a fuel fill fitting, to starboard, on the side deck, and vented via vent fittings on the hull sides, port and starboard, below the fuel fill. These hoses need to be inspected seasonally to assure that the clamps that attach the hoses to the tanks, and fill and vent fittings, are tight, and that the hoses are in good condition.

The fuel goes from the tank to the engines and generator, as indicated in the schematics for gas and diesel systems (Figures 5-1 and 5-2). These hoses and their crimped fittings need to be inspected annually for deterioration. If any suspect areas are found, they should be taken care of immediately, before the boat is used again.

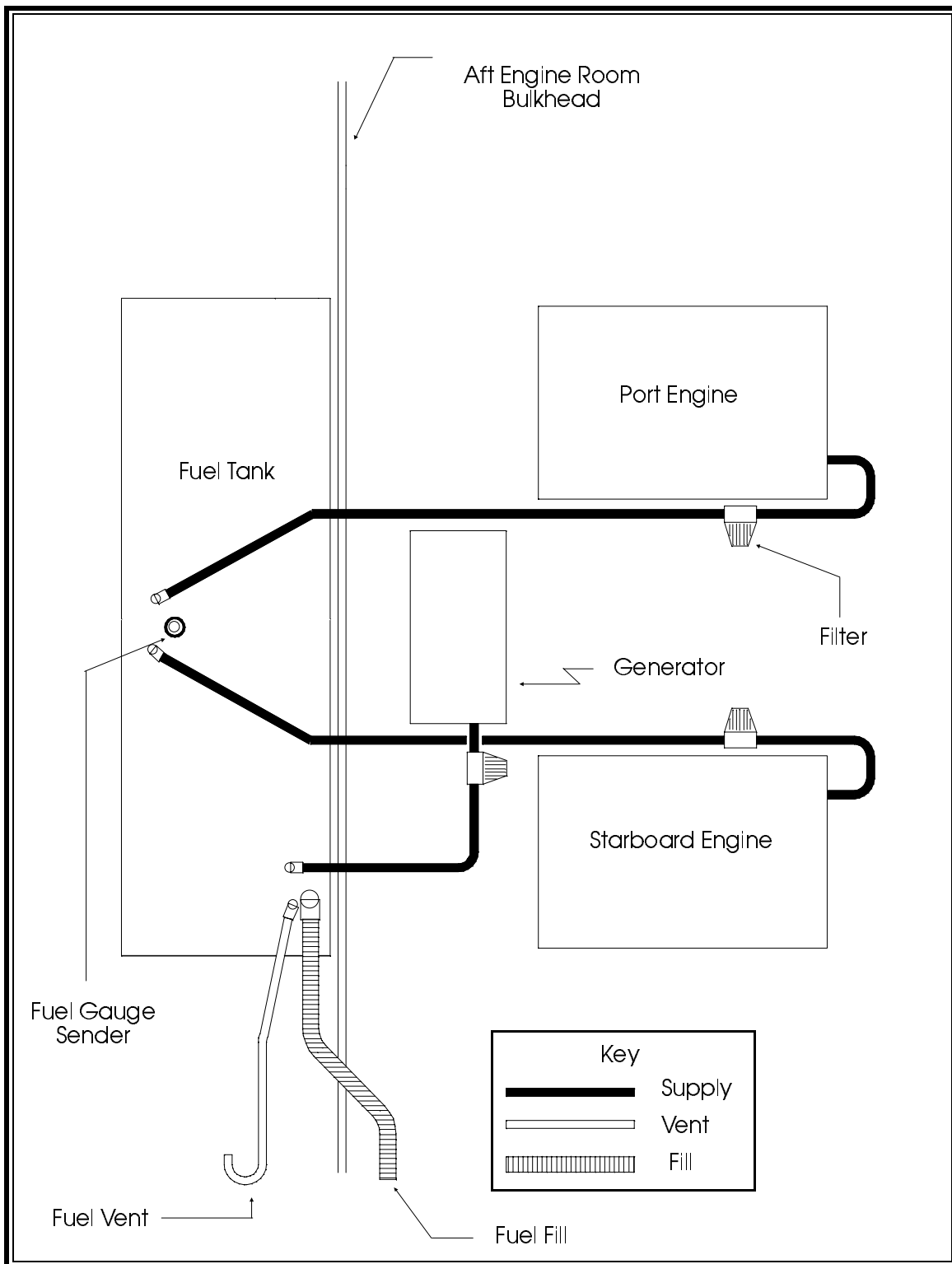


Figure 5-1: Gas Fuel Schematic

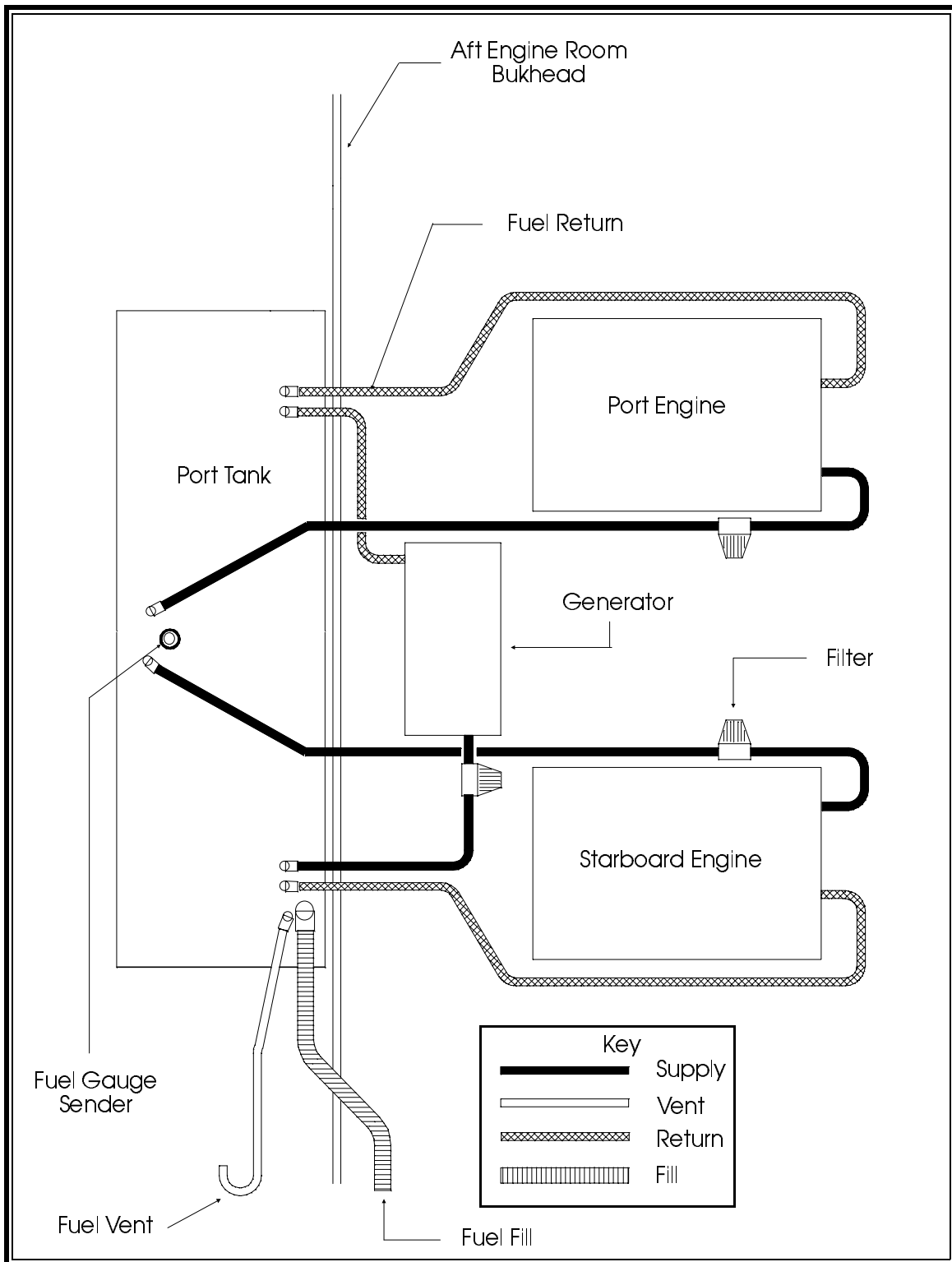


Figure 5-2: Diesel Fuel Schematic



FUEL IS EXTREMELY FLAMMABLE. ANY PROBLEMS WITH THE FUEL SYSTEM IN YOUR BOAT MUST BE CORRECTED IMMEDIATELY. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH.

The fuel filters/water separators are located inboard of the main stringers in the engine room, forward, and should be cleaned every 25 hours, or twice a season. To clean the filters in either system, follow this procedure:

1. Turn all electrical switches to the OFF position.
2. Close the valves in the fuel system.
3. Remove the top of the filter. On gas systems, first remove the clamp band on the outside of the top. On diesel systems, first remove the fastener on the top of the filter.
4. Remove the filter element from the filter body and clean thoroughly. If damaged or uncleanable, replace.
5. Wipe the inside of the can with a clean cloth.
6. Check all O-ring seals in the top of the filter for wear and replace if necessary.
7. Install the fuel filter into the filter body.
8. Replace the filter top and attach with the fastener or clamping band.



MAKE SURE ALL CONNECTIONS ARE TIGHT, AND THAT THERE ARE NO FUEL LEAKS.

5 . 2 . FRESH WATER SYSTEM

The fresh water system requires very little maintenance (see Figure 5-3). The biggest problem many boat owners have is that the water in the water tank (located aft and under the compan-

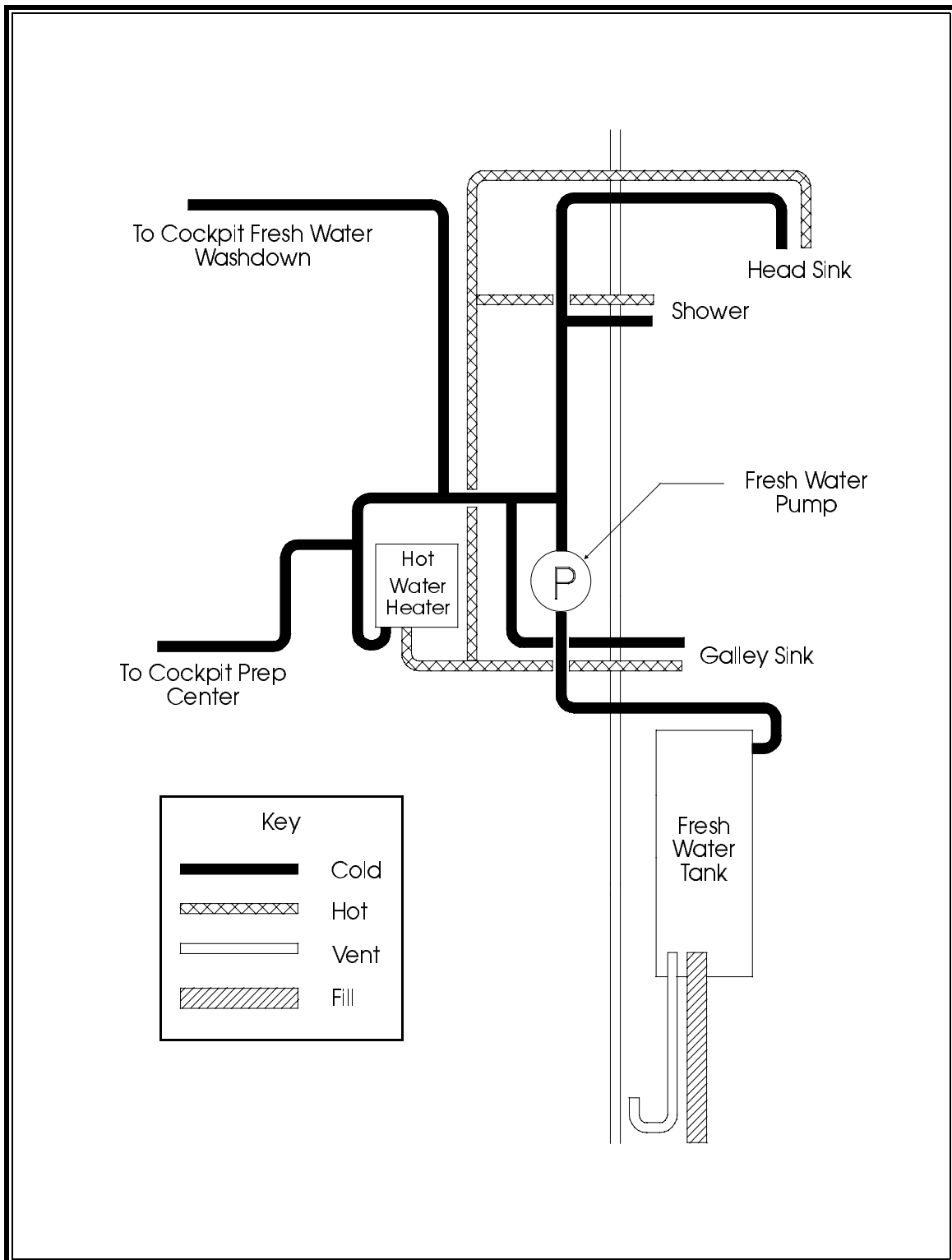


Figure 5-3: Fresh Water Schematic

ionway steps) is not used up and replenished often enough, and becomes stale. To combat this problem, you can drain the tank periodically and refill, or add a water conditioner to the tank periodically. Water conditioners are available at your **PURSUIT** dealer or R.V. supply stores.

The three pieces of equipment in the fresh water system that may require maintenance are the water heater, the fresh water pump and the windshield washer system filter. Refer to the owner's manuals supplied by the equipment manufacturers for specifics on the water heater and pump. The windshield washer filter (located on the forward engine room bulkhead) may need cleaning periodically.

5 . 3 . ELECTRICAL SYSTEM

5 . 3 . 1 . 12 V D.C. System



IN ORDER TO AVOID ELECTRICAL SHOCK, THE ELECTRICAL SYSTEM SHOULD ONLY BE REPAIRED BY A QUALIFIED MARINE ELECTRICIAN.

Your boat comes equipped standard with several gel cell batteries. Twice a season, the batteries need to be cleaned. To do this:

1. Turn the main D.C. switches OFF and disconnect the battery.
2. Use a cloth and a solution of bicarbonate of soda and water to wipe the tops.
3. Clean the battery terminals.
4. Reconnect the battery cables to the terminals and tighten.

Please refer to the owner's manual supplied by the battery manufacturer for any additional maintenance instructions.

The batteries in your boat are kept charged when the engines are running, by alternators on the engines. If equipment in the 12 volt D.C. system is used without the engines running, the

batteries may lose their charge. They may be recharged with the 110 volt A.C. installed battery charger (see Section 2.7.2.). If you have trouble getting them charged, or to hold a charge after charging, contact your **PURSUIT** dealer or a marine electrical service to investigate the cause.

Every time you use your boat, it is a good idea to check all the D.C. equipment on your boat. If you find something that does not work properly, contact your **PURSUIT** dealer or a qualified marine electrical service to repair.

5 . 3 . 2 . 110 V A.C. System



IN ORDER TO AVOID ELECTRICAL SHOCK, THE ELECTRICAL SYSTEM SHOULD ONLY BE REPAIRED BY A QUALIFIED MARINE ELECTRICIAN.

The terminals on each end of the shore cord should be checked for corrosion every time it is used, before using. The outside should also be checked for cracks and chafing of the insulation each time it is used.

The generator, if installed, requires regular maintenance and you should refer to the owner's manual supplied by the generator manufacturer for specifics.

Every time you use your boat, it is a good idea to check all the A.C. equipment on your boat. If you find something that does not work properly, contact your **PURSUIT** dealer or a qualified marine electrical service to repair.

5 . 4 . EXTERIOR EQUIPMENT AND FIBERGLASS

The exterior of your **PURSUIT** 3000 Offshore Express, like most fiberglass boats, requires very little maintenance to keep in top shape, but some is necessary. Any installed electronics should be kept clean and dry and should be maintained according to the owner's manuals supplied by the equipment manufacturer.

5.4.1. Fiberglass Surfaces

The rest of the exterior should be maintained after each use of the boat as follows:

1. Rinse the boat with clean fresh water.
2. Wash all exterior surfaces and hardware with a sponge, or soft bristle brush, and a solution of fresh water and detergent. Non-skid areas may be scrubbed with a stiff bristle brush.



Do not use abrasive cleaners on smooth fiberglass surfaces. They will dull the surface and allow dirt to penetrate the surface.

3. Rinse the boat with fresh water.

At least once a year, apply a good grade automotive or marine wax to the smooth fiberglass surfaces. Follow the directions supplied with the wax. After a period of time, when your boat has been exposed to the sunlight, the gelcoat surface will fade, dull, or chalk. This will require a heavier buffing to bring back to its original luster. To accomplish this, a fine cleaning compound such as *Mirror Glaze® #1* and a power buffer will be required. Follow all directions supplied with the cleaner. After buffing, apply a coat of wax to all smooth surfaces.

Hull sides and transom should receive the same cleaning as the other fiberglass surfaces.

A pamphlet called, *Congratulations, Welcome To The Fiberglass Fleet*, is included in the literature packet. Read this pamphlet for more information on the care of fiberglass.

If the fiberglass or gelcoat surface should need repair, contact your **PURSUIT** dealer or another qualified marine service facility.

5.4.2. Plexiglass

The hatches and portholes in your boat are made of plexiglass and must only be cleaned with mild soap and water, or plexiglass cleaner.



Keep all strong solvents such as acetone and lacquer thinner, as well as strong window cleaners, such as *Windex*[®], away from plexiglass surfaces. They can cloud and cause crazing in the plexiglass surface.

5.4.3. Hardware

All exterior chrome hardware may be cleaned with any available chrome cleaner. If the exterior stainless hardware begins to show signs of "bleeding", scrubbing with a mild, non-abrasive cleaner such as *Soft Scrub*[®] will remove any tarnish. Follow with a coat of wax as you would the fiberglass surfaces.

5.4.4. Canvas and Upholstery

The upholstery on the exterior of your boat, such as the helm and companion seats, cockpit coaming bolsters, and optional aft lounge, should also be cleaned with a solution of mild detergent and water, or vinyl shampoo, and rinsed well with clean fresh water. An application of vinyl conditioner may also help restore them to their original condition.

The canvas on your boat should be cleaned the same as the exterior, with a mild soap and clean water. The underside should be brushed frequently as this will help prevent the combination of dirt and moisture, from condensation, from staining the fabric. The clear side curtains, and forward clear connector (between the top and windshield), should never come in contact with soap and water, and may be kept clear and pliable with a periodic application of lemon *Pledge*[®]. Wax the zippers occasionally to keep them working well.

5 . 4 . 5 . Hull Bottom

The portion of the hull that is below the water line should be kept clean and free of marine growth with the use of an anti-fouling paint. Refer to the paint manufacturer for recommended periodic cleaning procedures. Typically, the bottom will need to be repainted once a year and then cleaned a few times during the year. Contact your local **PURSUIT** dealer for recommended local cleaning procedures and services. Failure to keep the bottom clean will result in loss of boat performance and fuel economy.

5 . 4 . 6 . Underwater Gear

The underwater gear (shafts, struts, propellers, rudders) do not come painted with the anti-fouling paint, if that option is purchased (see Figure 5-4). Consequently, regular scrubbing is required, depending on where your boat is stored, in order to keep them clean. Fouled underwater gear can greatly effect your boat's performance, especially growth on the propeller.

Sacrificial zincs have been installed on the propeller shafts, and on the transom of your boat, to prevent electrolysis of underwater hardware. Depending on local conditions where your boat is stored, they will need to be replaced annually, or more often. Regular inspection is recommended to monitor their condition. See your **PURSUIT** dealer or local qualified marine service facility for replacement.

Annually, the strut cutlass bearing should be checked for wear. If the bearing is worn, it will cause excessive shaft vibration while running, and therefore should be replaced. To replace, see your **PURSUIT** dealer or other qualified marine service facility.

5 . 5 . INTERIOR EQUIPMENT AND DECOR

The interior of your boat should be maintained much like the inside of your home. The fabrics that the cushions are made of should be treated much like the fabrics in home upholstery. The major difference is that the interior may be subjected to moisture not found at home. Periodically, put the cushions, blankets,

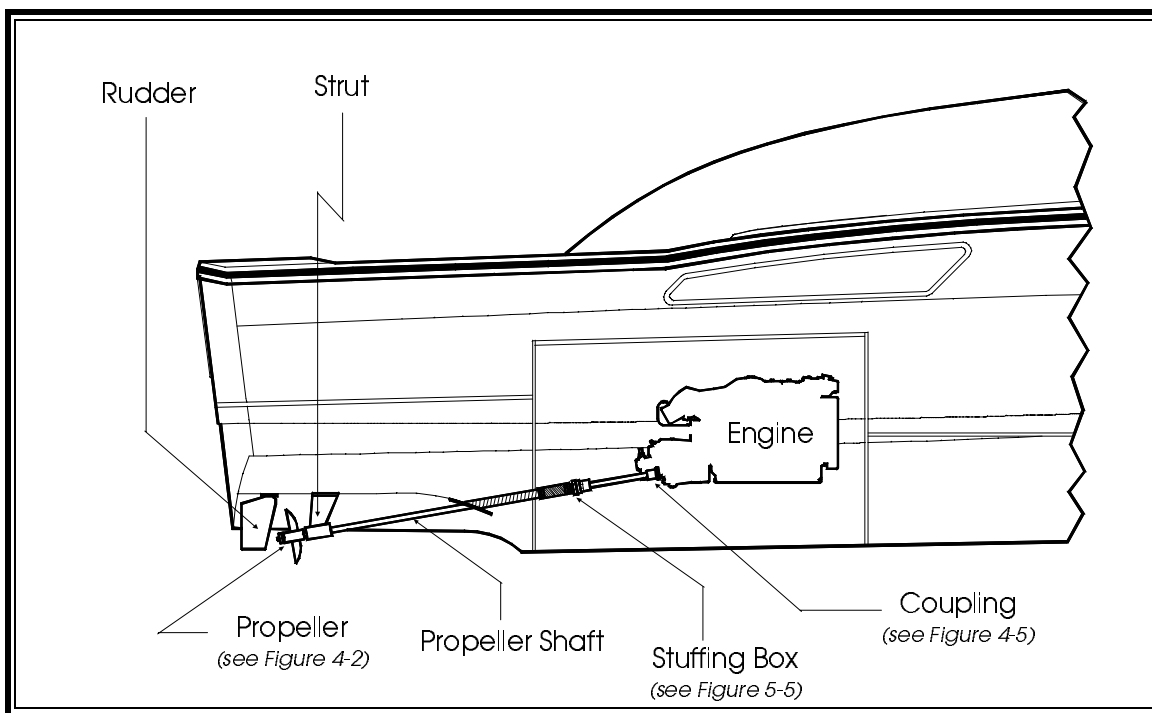


Figure 5-4: Propulsion System

sheets, etc. out in the sun to allow them to dry thoroughly and air out well. If they get wet with salt water, due to a hatch or porthole being left open, be sure to rinse them with fresh water to remove the salt crystals and then dry thoroughly. Salt crystals retain moisture and will damage the material.

The carpet should be vacuumed periodically and cleaned just the same as a home carpet.

The formica surfaces should be cleaned with a mild soap and water, or a non-abrasive cleaner, such as *Soft Scrub*®, for difficult stains.

Plexiglass surfaces should be cleaned as in Section 5.4.2.

5 . 6 . ENGINE ROOM

The engine room should be kept clean and free of any debris. A clean engine room assures that the engines (and generator, if installed) will receive a clean supply of air while running, and any

problems or leaks will be immediately obvious during routine engine fluid checks.

5 . 6 . 1 . Engines, Transmissions and Generator

As mentioned in Section 3.1., it is important to check your engine, transmission, and generator fluids every time you use the boat, and daily on long trips. If the engines and transmissions are kept clean, leaks and other problems are easier to spot. Oil, coolant, and filter change intervals are outlined in the engine and generator manufacturer's owner's manual. Please read them and follow their recommendations exactly. Have all engine, transmission, and generator maintenance performed by your **PURSUIT** dealer or other qualified marine service facility.

5 . 6 . 2 . Stuffing Boxes

Your **PURSUIT** 3000 Offshore Express comes equipped with PSS (packless sealing system) propeller shaft seals for stuffing boxes (see Figure 5-5). These shaft seals use engine raw cooling water for lubricant and have a hose running from the shaft seal to the engine. The system should not leak water into your boat. If you notice leakage of the seal during, or after, a trip, contact your local **PURSUIT** dealer or qualified marine service facility. Additional information from the shaft seal manufacturer is provided in the owner's packet.

5 . 6 . 3 . Ventilation System

The exhaust blowers are permanently lubricated and should require no maintenance. The hoses that run from the blowers, into the bilge, should be checked periodically to be sure that they are in the lowest part of the bilge so as to ventilate the engine room properly.

The engine room intake plenums are designed so as to remove moisture from the incoming air and drain it overboard. The drain fittings and hose should be kept clean and free flowing.

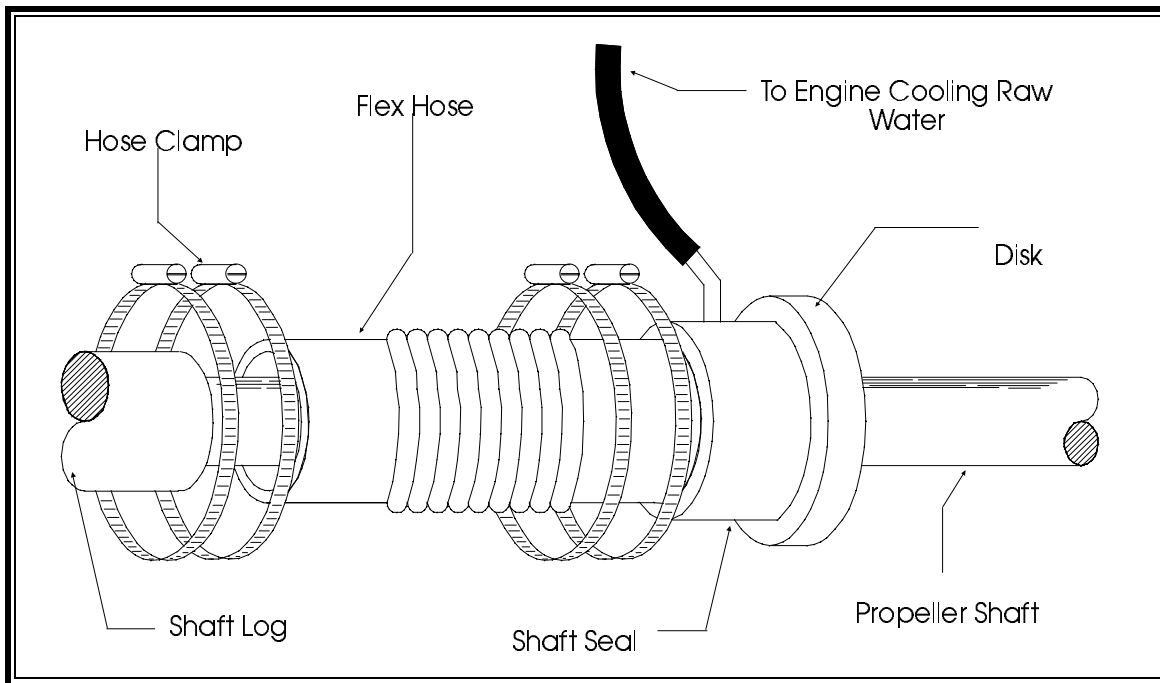


Figure 5-5: Stuffing Box

5 . 6 . 4 . Raw Water Intake Strainers

The engine raw water intakes (see Figure 5-6), generator raw water intake, optional air conditioning raw water intake, and optional raw water washdown pump intake are equipped with strainers. The strainers should be checked each time you use the boat to assure that no debris has accumulated that may block the flow.

If they are clogged and need cleaning, follow this procedure:

1. With the related equipment not operating, close the seacock, at the hull bottom, to stop the flow of water.
2. Remove the top of the filter by unscrewing counterclockwise. A spanner wrench has been provided for this purpose.
3. Lift the strainer out by the handle on the top.



Figure 5-6: Engine Intake Pickup & Strainer

4. Remove any debris from the strainer screen and rinse with clean water. Check to be sure that the O-ring under the top is intact and replace if necessary.
5. Install the strainer, replace the cover, and tighten with the spanner wrench.
6. Open the seacock, start the related equipment, and check the system for leaks.

5 . 7 . HEAD SYSTEM

The head in your **PURSUIT** 3000 Offshore Express comes supplied with operating and maintenance instructions from the manufacturer. Schematics of the various head systems are shown in Figures 5-7 through 5-9.

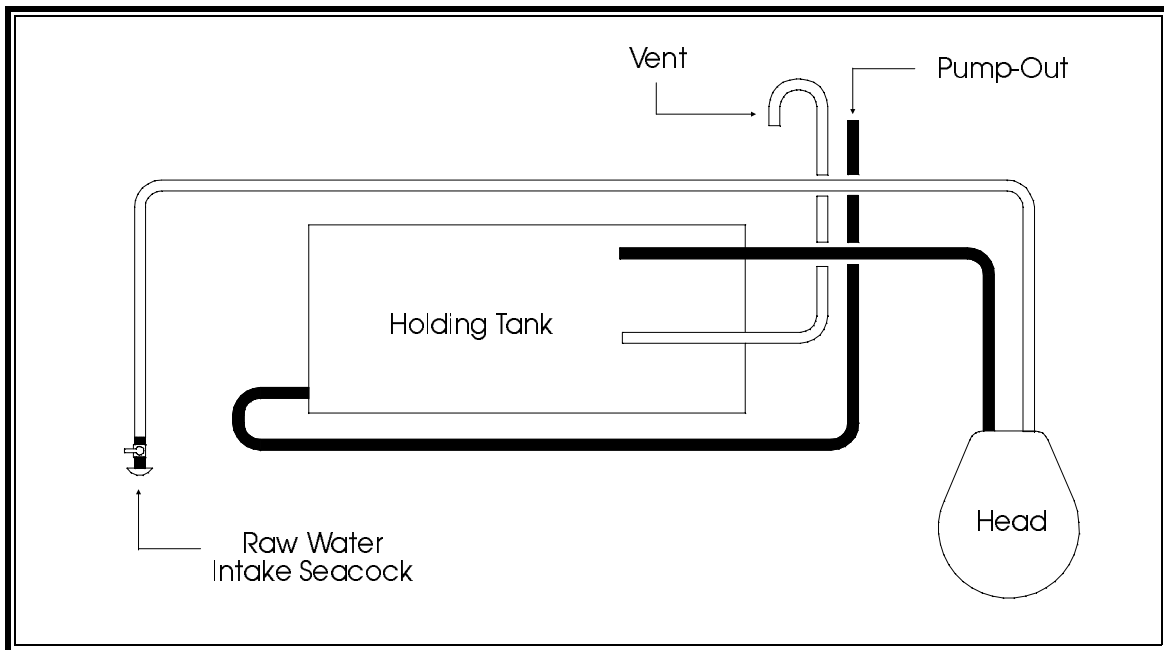


Figure 5-7: Standard Head Schematic

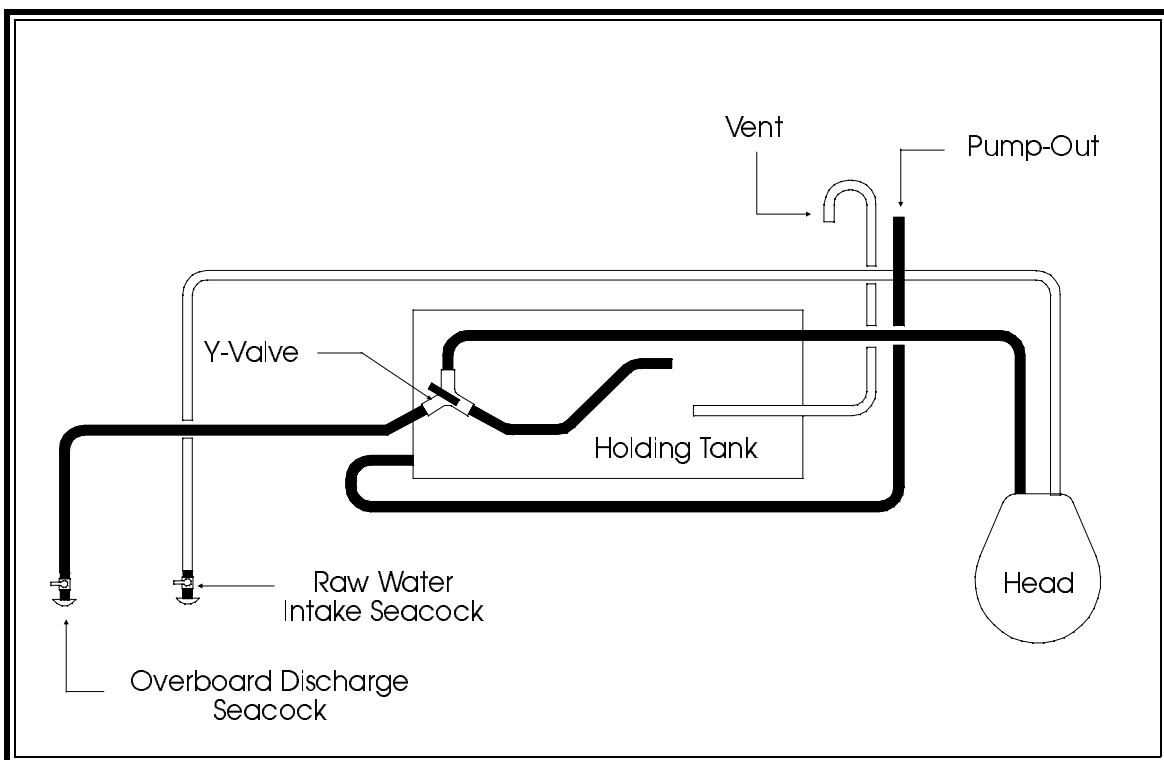


Figure 5-8: Holding Tank / Y-Valve Schematic

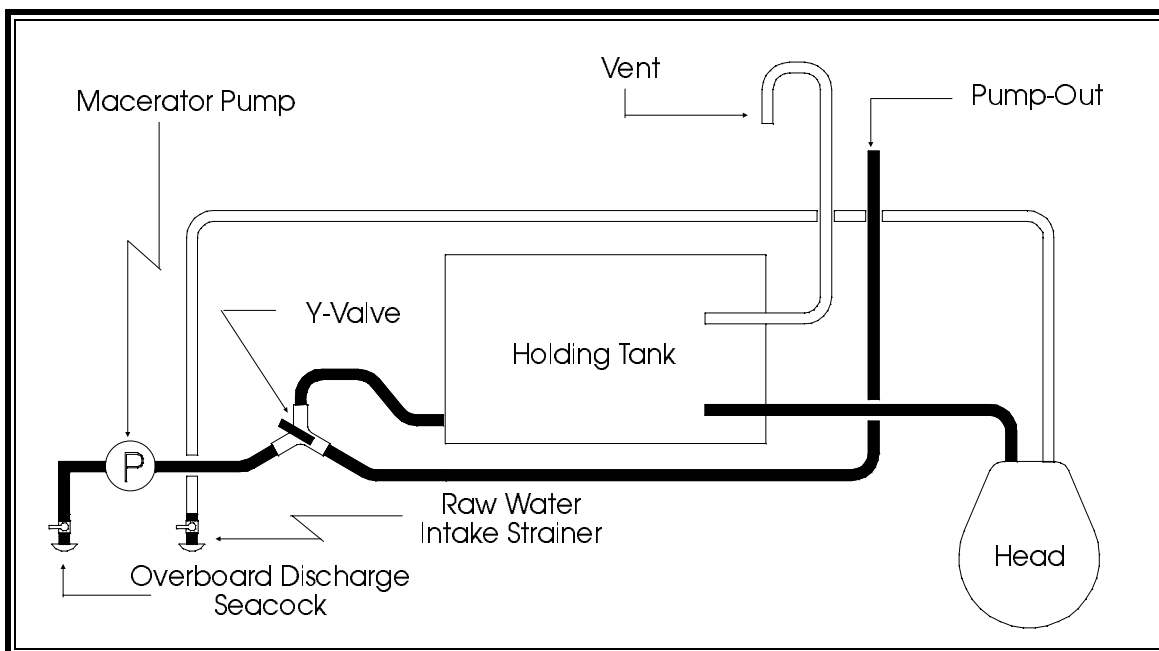


Figure 5-9: Head with Macerator Schematic

When the holding tank (located outboard of the port engine in the engine room) is full, it is necessary to pump it out. To do this:

1. Take your boat to a marine facility where a pump out station is located.
2. Remove the cap from the waste deck fitting, located on the port side deck, at the aft end of the side windshield (it has a green cap), with the special wrench provided. Turn counterclockwise until loose and remove.
3. Insert the pump out hose into the opening.
4. Remove all waste from the holding tank.
5. Fill the tank with clean water and pump out again.
6. Replace the cap and tighten.
7. Open the flushing valve on top of the holding tank (near the level sender) and flush the sender for 5 seconds. Close the valve.

Note: The Y-valve handle position must be checked carefully. The direction of flow is printed in the face of the valve and may **not** be the same as indicated by the handle.

5 . 8 . DRAINAGE SYSTEM

The drainage system (see Figure 5-10) consists of the forward and aft bilge pumps, the shower sump, the head and galley sink drains, the companion seating drain, and the engine room air intake plenum drains.

The bilge pumps and shower sump areas need to be checked before leaving the boat for debris that might clog the pump. The float switches must also be checked to see that they are turning the pumps on and off properly. To check, just lift the float until the pump comes on, and lower until it stops. If they are not working, do not leave your boat unattended until they are fixed.

The other hoses should only need to be checked every other month to be sure that they are draining properly. If clogged, pressurized water should be sufficient to clear.

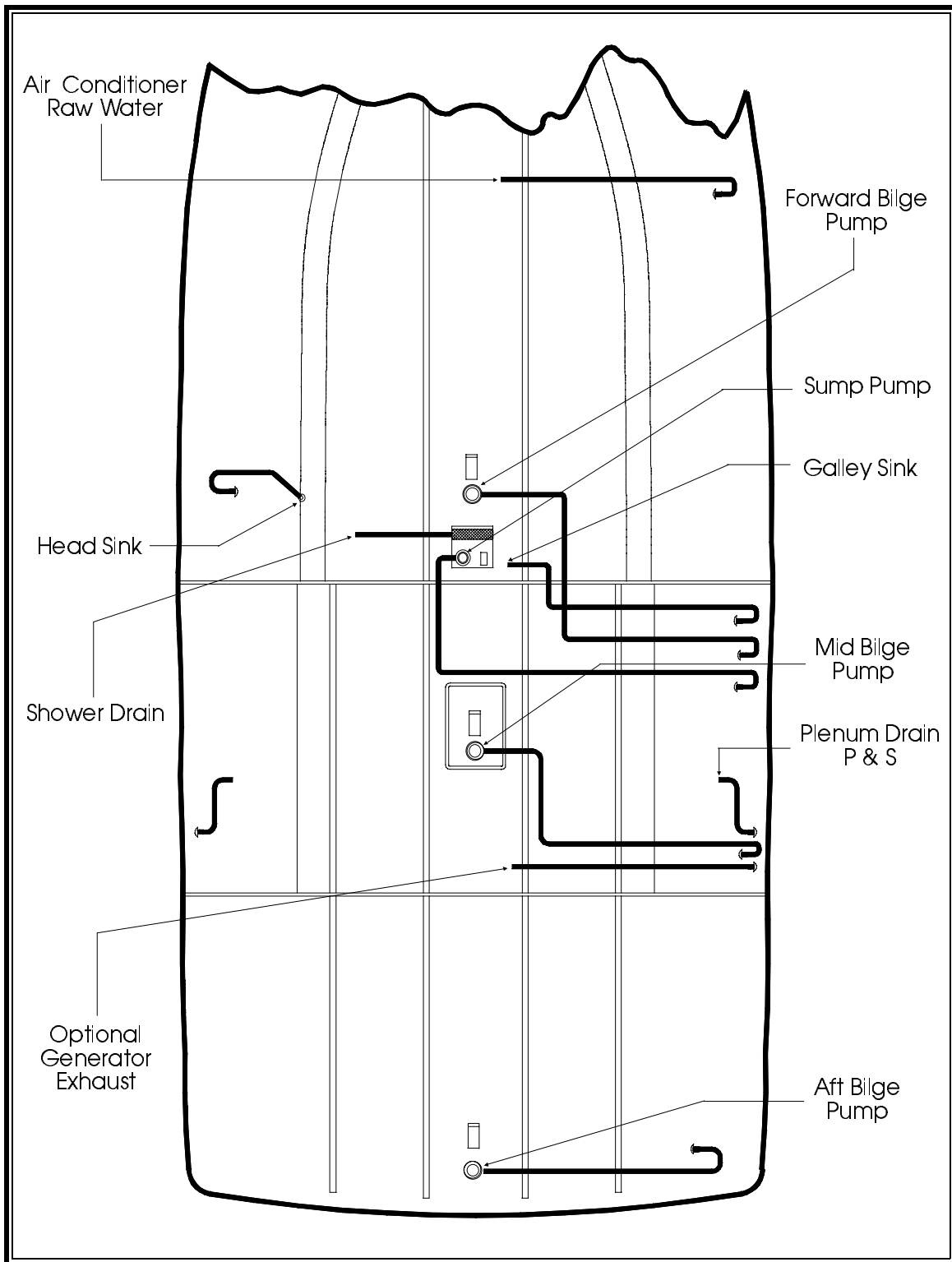


Figure 5-10: Drainage System Schematic

This page intentionally left blank.

Chapter 6

STORING AND WINTERIZING YOUR BOAT

If you live in a climate where you will not be able to use the boat for several months a year, there are a number of things that must be done to prevent damage to your boat from the cold and from lack of usage. These items assume that your boat will be hauled out of the water during this storage time. To lift the boat, follow the instructions in Section 4.2.

6 . 0 . 1 . *Supporting the Boat During Storage*

The best way to support your boat when it is out of the water is on a cradle, made specifically for this purpose (see Figure 6-1). The cradle must be well supported and placed on a level surface. It must be placed in the proper fore and aft position in order to properly support the hull. When the cradle is in the correct location, the bunks will match the bottom of the hull. Custom made cradles are available from the factory, through any **PURSUIT** dealership. The cradles come with padding on the bunks to protect the bottom of the boat.

6 . 0 . 2 . *Storage*

If the boat is to be stored indoors, be sure that the building has enough ventilation. It is important that the boat be well ventilated during storage.

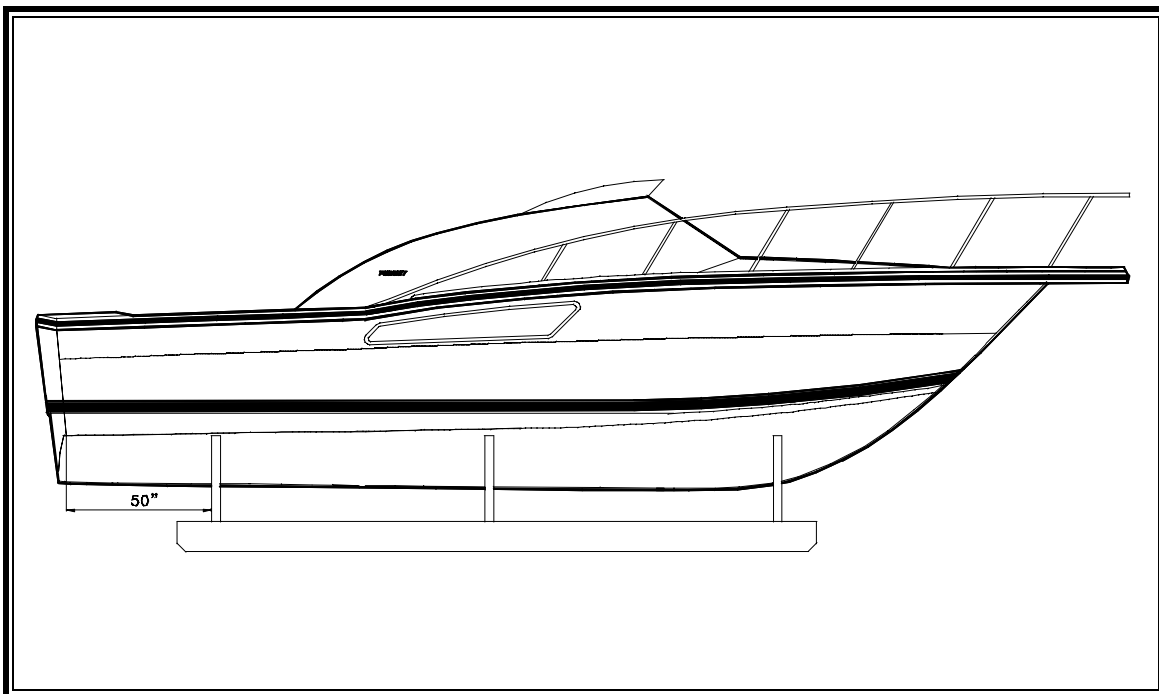


Figure 6-1: Cradle Diagram

If the boat is to be stored outdoors, a proper cover is necessary to protect the boat from the elements. Construct a frame over the top of the boat to support a canvas or plastic cover. The frame should be built so as to be slightly wider than the outside of the boat. The cover should be fastened securely, as a loose flapping cover for an extended period of time will damage the gelcoat surface.

6 . 1 . FUEL SYSTEM

The fuel tanks should be filled to near capacity before storage in order to minimize fuel deterioration. The addition of an appropriate fuel conditioner will also prolong the fuel life. Fuel remaining in the fuel systems of the engines and generator should be treated per the engine or generator manufacturer's recommendations.

6 . 2 . FRESH WATER SYSTEM

To prepare your boat's fresh water system for winterizing, the system must be drained. The procedure for draining is:

1. Make sure the water heater breaker on the A.C. main panel is in the off position.



HOT WATER WILL CAUSE BURNS. DO NOT FOLLOW THESE PROCEDURES WITH HOT WATER IN THE SYSTEM.

Do not operate the water heater without water in the fresh water system.

2. Open all fresh water faucets in the boat, galley, head, and cockpit.
3. Remove the hoses from the bottom of the water tank, input and output sides of the water pump, and let the tank and hoses drain into the bilge.
4. Run the fresh water pump for a few seconds to remove the water from the bottom of the pump.
5. Drain the water from the water heater by opening the valve on the bottom of the water heater and letting the water drain into the bilge. Close the valve when the water tank is empty.

The system must then be flushed with potable water anti-freeze. To flush the system:

1. Close all faucets in the fresh water system, galley, head, and cockpit.
2. Pour five gallons of potable water systems anti-freeze into the water tank.

3. Turn on the fresh water pump breaker on the D.C. main panel.
4. Open all faucets in the system, hot and cold, one at a time, until the pink anti-freeze begins to come out, and then close.
5. Turn off the fresh water pump breaker.

To protect the shower sump from freezing:

1. Pour two quarts of potable water anti-freeze into the shower drain.
2. Run the shower sump until the anti-freeze is gone.
3. Turn off the pump switch.

6 . 3 . ELECTRICAL SYSTEM

6 . 3 . 1 . 12V D.C. System

The only major component of your D.C. system that needs preparation for winter storage are the batteries. To prepare them for storage:

1. Make sure the batteries are fully charged.
2. Turn the D.C. main switches to the OFF position.
3. Clean the battery terminals and case. Apply a coat of petroleum jelly to the terminals.

You should check the information provided with any installed electronics to see if they may be damaged by the lowest temperatures that your boat may experience. If so, remove and store in a clean, dry area that will protect them from damaging temperatures.

6 . 3 . 2 . 110V A.C. System

The installed A.C. electrical system in your **PURSUIT** 3000 Offshore Express does not require any winterizing procedure.

6 . 4 . EXTERIOR EQUIPMENT AND FIBERGLASS

The entire exterior of your boat should be completely washed and dried before storage for the winter. The fiberglass surfaces, bottom paint, zincs, etc. should wait for the spring for maintenance and/or replacement.

Underwater gear can be coated with a light coat of petroleum jelly or boat wax to prevent corrosion. The cutlass bearing in each strut should be coated with a rubber lubricant to prevent seizing. Do not use petroleum products on the rubber bearing.

All exterior hardware should be protected by a heavy coat of boat wax or petroleum jelly.

6 . 5 . INTERIOR EQUIPMENT

The interior should be carefully cleaned before storage. All carpet should be vacuumed, all upholstery cleaned, and the interiors of all cabinets should be emptied and wiped clean. Any bilge areas should also be wiped clean.

Whether stored inside or outside, open all interior drawers, lockers, and cabinets to allow them to properly ventilate and stay fresh. If possible, remove all upholstery, carpeting, and cushions and store them elsewhere.

6 . 5 . 1 . Air Conditioning

Your **PURSUIT** 3000 Offshore Express has a "self contained" air conditioning unit located under the forward storage hatch, beneath the forward berth cushion. The raw water pump and intake strainer are located at the transom of the boat, in the bilge area, under the large cockpit floor hatch (see Figure 6-2). To winterize:

1. After hauling the boat, open the seacock, remove the top from the strainer with the spanner wrench, and disconnect the intake hose from the pump. Remove all water from the hoses, seacock and strainer.

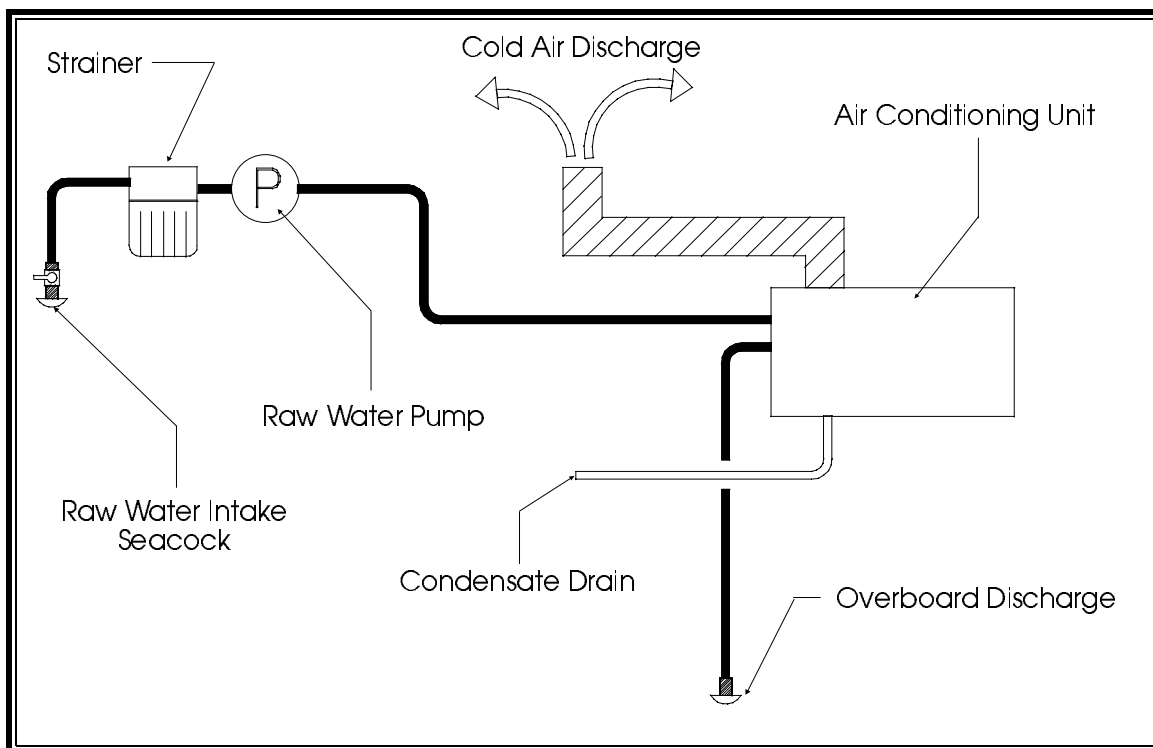


Figure 6-2: Air Conditioning Schematic

2. Disconnect the outlet hose from the pump and drain all water from the air conditioning unit. If you are not sure if all water has drained from the system, use compressed air blown in from the air conditioning water outlet, on the starboard hull side, to be sure.



Be very careful with compressed air. Too much pressure or volume can damage the raw water system.

3. Run the pump for a few seconds to be sure there is no water left in it. Re-connect the hoses to the pump and re-assemble the strainer.



When reconnecting raw water hoses, be certain to tighten clamps well. Leaking fitting on raw water hoses can sink the boat.

4. The system can be filled with an anti-freeze mixture. Refer to the air conditioning manufacturer's owner's manual for the recommended procedure.

6 . 5 . 2 . Head System

The first thing that must be done is to pump out the holding tank. Before doing so, close the intake seacock for the head system (located in the engine room, outboard of the port engine, toward the aft end of the engine), and run the toilet without incoming water to drain the hose running from the toilet to the holding tank.

Take your boat to a facility with the required pump-out facilities and follow the procedure outlined in Section 5.7.

After your boat has been hauled out of the water, open the head raw water seacock to allow the water between the head and seacock to drain out. If necessary, disconnect the raw water hose from the head and blow through with compressed air.



Be very careful with compressed air. Too much pressure or volume can damage the raw water system.

Reconnect all hoses.

If desired, flush 1-2 gallons of potable anti-freeze into the system.



When reconnecting raw water hoses, be certain to tighten clamps well. Leaking fittings on raw water hoses can sink the boat.

Note: Schematics of all head systems are located in Chapter 5, *Routine Maintenance*.

6 . 6 . ENGINE ROOM AND BILGE AREAS

All the bilge areas, forward under the companionway steps, engine room, and aft under the cockpit should be wiped clean. The hoses leading from the bilge pumps in the engine room and

under the cockpit floor should be disconnected from the pumps and drained. Any bilge water should then be removed with a sponge and wiped dry.



When reconnecting raw water hoses, be certain to tighten clamps well. Leaking fittings on raw water hoses can sink the boat.

6 . 6 . 1 . Engines, Transmissions and Generator

The engines, transmissions, and generator should be prepared for storage according to the manufacturer's recommendations. Please refer to the owner's manuals for these items for specific instructions.

6 . 6 . 2 . Exhaust Systems

The exhaust systems for the optional generator must have the water drained from it's muffler.

The generator muffler should be drained by removing the plug from the bottom of the muffler (see Figure 6-3), allowing the water to drain out, and replacing the plug.



BE CERTAIN THAT THE DRAIN PLUGS ARE INSTALLED TIGHTLY. FAILURE TO DO SO WILL ALLOW ENGINE EXHAUST GASES CONTAINING CARBON MONOXIDE AND WATER INTO THE BILGE AREA.

6 . 6 . 3 . Raw Water Systems

The engine cooling water systems must be drained by opening the seacock, opening the strainer, and disconnecting the hoses, if necessary, to remove all water. Reconnect all hoses and reassemble the strainer when complete.

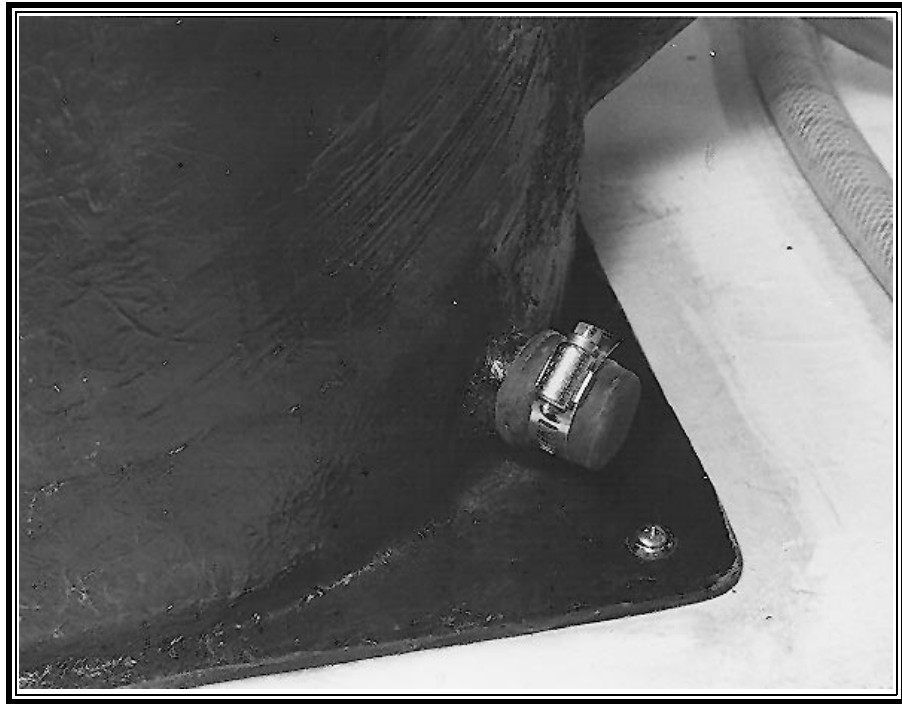


Figure 6-3: Generator Muffler Plug

The raw water washdown system must also be drained. To do so:

1. Open the seacock and the washdown faucet, in the cockpit, under the starboard covering board.
2. Disconnect the hoses from the intake and outlet sides of the pump and let the water drain out. Use compressed air, if necessary, to remove all the water.



Be very careful with compressed air. Too much pressure or volume can damage the raw water system.

3. Run the pump for a few seconds to remove all water from the pump body.
4. Lubricate the pump impeller per instructions in the pump owner's manual.
5. Reconnect all hoses and tighten the clamps securely.



When reconnecting raw water hoses be certain to tighten clamps well. Leaking fittings on raw water hoses can sink the boat.

6 . 6 . 4 . Steering System

The steering system is located in the bilge under the large cockpit floor hatch (see Figure 6-4). To prepare it for storage:

1. Use clean water and detergent to wash off the steering arms and linkage. Dry with a clean cloth.
2. Apply a light coat of petroleum jelly to the piston rod.
3. Lubricate the pivot points and upper rudder bearings with a lightweight oil.

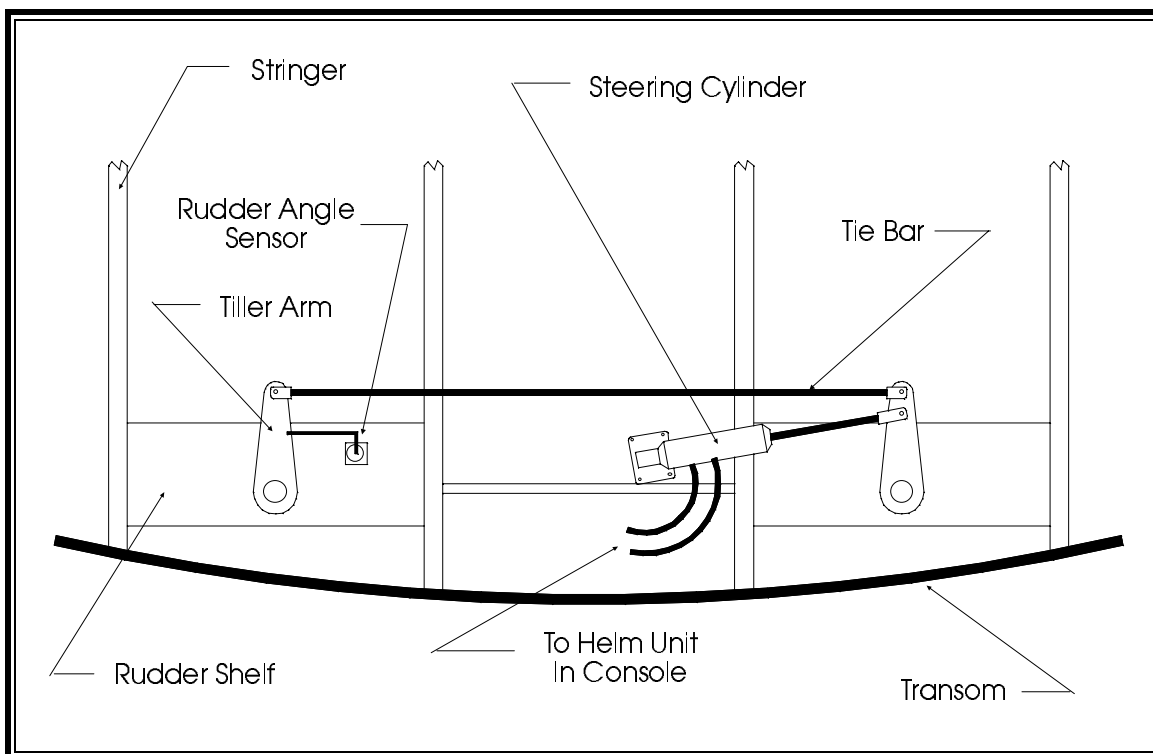


Figure 6-4: Steering System

4. Inspect the packing glands for wear. If worn, replace with new packing.
5. Coat all components with a light coat of petroleum jelly or other suitable corrosion inhibiting material such as CRC-666[®] or WD-40[®].

This page intentionally left blank.

Appendix A

SPECIFICATIONS

A . 1 . GENERAL

Twin Inboard

Crusader[®] 350 XL-HT - Gas

Crusader[®] 454 XL - Gas

Crusader[®] 454 XLI /MP (fuel injected) - Gas

Cummins[®] 6BTA5.9 B330 - Diesel. . . 330 HP approx

Volvo[®] KAMD44 - Diesel. 260 HP approx

Yanmar[®] 6LPSTE Y300, Diesel 300 HP approx

L.O.A. w/o pulpit 29' 1"

w/ pulpit 31' 2"

Beam 12' 0"

Hull Draft 2' 9"

Approximate Dry Weight 10,800 lbs

Standard Fuel Capacity 250 U.S. gal

Water Capacity 40 U.S. gal

Holding Tank Capacity 20 U.S. gal

Sleeping Capacity 4

Cockpit Length 6' 5"

Deadrise 19°

A . 2 . BOAT SPECIFIC

Boat Serial No:

Engine Option:

Port Engine Serial No:

Starboard Engine Serial No:

Port Transmission Serial No:

Starboard Transmission Serial No:

Seating:

Head System:

Other Installed Options:

This page intentionally left blank.

Appendix B

GLOSSARY

aft: in, near, or toward the stern of a boat

aground: a boat stuck on the bottom

amidships: in or toward the part of a boat midway between the bow and stern

anchor: a specially shaped heavy metal device designed to dig efficiently into the bottom under a body of water and hold a boat in place

anchorage: an area specifically designated by governmental authorities in which boats may anchor

athwartships: when an object lies on a line or in a plane at right angles to the centerline of a boat

beam: the breadth of a boat usually measured at its widest part

beamy: boats of greater than normal beam

bilge: the lower interior areas of the hull of a boat

bilge pump: pumps water that collects in the bilge, overboard

boarding ladder: set of steps temporarily fitted over the side of a boat to assist persons coming aboard

boathook: short shaft of wood or metal with a fitting at one end shaped to aid in extending one's effective reach from the side to a boat

bow: the front end of a boat

bow line: a line that leads forward from the bow of the boat

bow rail: waist high rails of solid tubing to aid in preventing people from falling overboard

bridge: the area from which a boat is steered and its speed controlled

bridge deck: deck forward and usually above the cockpit deck

bulkhead: vertical partition separating compartments of a boat

cabin: superstructure above the main deck level

capsize: when a boat turns over

chain locker: a locker, usually located in the bow of a boat, used for stowing the anchor line or chain

Chapman's: *Chapman-Piloting, Seamanship, and Small Boat Handling, 60th Edition*, by Elbert S. Maloney, Hearst Marine Books, NY, ISBN 0-688-10425-8

chock: a deck fitting, usually of metal, with inward curving arms through which lines such as mooring or anchor lines are passed so as to lead them in the proper direction both on board and off the boat

closed cooling system: a separate supply of fresh water is used to circulate only within the engine

coaming: a vertical piece around the edges of cockpit, hatches, etc., to stop water on deck from running below

cockpit: an open space in the deck of a boat outside of the cabin and deckhouse

companionway: openings in the deck of a boat to provide access below

compartment: the interior area of a boat divided off by bulkheads

cradle: the framework which supports a boat as she is hauled out

cutlass bearing: rubber bearing in the strut that supports the propeller shaft

deck: the floorlike platform of the boat

draft: the depth of water a boat needs to float

dry rot: a fungus attack on wooden areas

drydock: a dock that can be kept dry during boat construction or repair

engine bed: a sturdy structural member running fore-and-aft on which the engine is mounted

even keel: when a boat floats properly as designed

fender: a soft object of rubber or plastic used between boats and piles, pier sides, seawalls, etc. to protect the topsides from scarring and to cushion any shock of the boat striking a fixed object

flying bridge: an added set of controls above the level of the normal control station

fore: the part of the boat in which the bow is located

foundering: when a boat fills with water and sinks

freeboard: the height of a boat's topsides from the waterline to the deck

fuel pump: feeds fuel under pressure

galley: the kitchen of a boat

grab rail: hand-hold fittings mounted on cabin tops or sides for personal safety when moving around the boat, both on deck and below

ground tackle: a general term including anchors, lines, and other gear used in anchoring

grounds: a boat touches the bottom

gunwale: the upper edge of a boat's side

hand rail: rail mounted on the boat, for grabbing with your hand, to steady you while walking about the boat

harbor: an anchorage which provides reasonably good protection for a boat, with shelter from wind and sea

hatch: a door or cover for access down into a compartment of a boat

head: refers to both the toilet and toilet area

headroom: the vertical distance between the deck and the cabin or canopy top (or other overhead structure)

heat exchanger: used to transfer the heat that is picked up by the closed cooling system to the raw cooling water

helm: the operating area of a boat

hull: the frame or body of the boat

inboard: a boat with the engine mounted within the hull

keel: a plate or timber plate running lengthwise along the center of the bottom of a boat

knot: unit of speed, 1 knot = 1 nautical mile per hour

lay-up: to decommission a boat for the winter (usually in northern climates)

lazarette: a compartment in the stern of a boat used for general storage

length on the waterline (l.w.l.): a length measurement of a boat along the waterline

length overall (l.o.a.): a length measurement of a boat from the fore part of the stem to the after part of the stern

life preserver: provides additional buoyancy to keep a person afloat when he/she is in the water

limber hole: a passage cut into the lower edges of floors and frames next to the keel to allow bilge water to flow to the lowest point of the hull from where it can be pumped out

line: rope

lists: a boat that inclines to port or starboard while afloat

locker: a closet, chest or box aboard a boat

marina: a protected facility primarily for recreational small craft

marine ways or railways: inclined planes at the water's edge onto which boats are hauled

moored: secured with cables, lines, or anchors

nautical mile: distance measurement equal to a unit about 6/5th's of a statute (land) mile

oil pump: supplies lubricating oil where needed within the engine

outboard: a boat with the engine mounted on the transom and is detachable

overhead: the ceiling of a cabin or compartment

pier: a structure which projects out from the shoreline

piles or piling: a long column driven into the bottom to which a boat can be tied

plenum: a chamber for directing air flow, as in *engine intake air plenum*

pitching: the fore and aft rocking motion of a boat as the bow rises and falls

port: the left side of the boat when facing the bow

porthole (port): the opening in the side of a boat to allow the admittance of light and air

propeller shaft: shaft which runs from the back of the engine gear box, aft, through the stuffing box, shaft log, struts(s), and onto which the propeller is attached

raw water cooled: water for cooling is drawn in through a hull fitting, circulated in the engine, and then discharged overboard

reduction gear: often combined with the reverse gear so that the propeller, turning at a slower rate than the engine, will have increased efficiency

reverse gear: change the direction of rotation of the propeller to give a thrust in the opposite direction for stopping the boat or giving it sternway

roll: a boat's sidewise rotational motion in rough water

rope locker: see "chain locker"

rubrail: railing (often rubber or hard plastic) that runs along the boat's sheer to protect the hull when coming alongside docks, piers, or other boats

rudder: a moveable flat surface that is attached vertically at or near the stern for steering

scrupper: an opening in the side or transom of the boat through which water on deck or in the cockpit is drained overboard

seacock: safety valves installed just inside the thru-hull fittings and ahead of the piping or hose running from the fittings

shaft log: pipe through which the propeller shaft passes

sheer: the uppermost edge of the hull

slings: a strap which will hold the boat securely while being lifted, lowered, or carried

sole: the deck of a cockpit or interior cabin

spring line: a line that leads from the bow aft or from the stern forward to prevent the boat from moving ahead or astern

starboard: the right side of a boat when facing the bow

stem: the line at which the port and stern topsides meet at the bow

stern line: a line that leads aft from the stern of the boat

stern: the rear end of a boat

stringer: longitudinal members fastened inside the hull for additional structural strength

strut bearing: see "cutlass bearing"

strut: an external support under the hull for the propeller shaft

stuffing box: prevents water from entering at the point where the propeller shaft passes through the shaft log

superstructure: something built above the main deck level

swamps: when a boat fills with water from over the side

swimming ladder: much the same as the boarding ladder except that it extends down into the water

taffrail: rail around cockpit

thru-hull: a fitting used to pass fluids (usually water) through the hull surface, either above or below the waterline

topsidess: the side skin of a boat between the waterline or chine and deck

transom: flat planking across the stern

travel lift: machinery used at boat yards to hoist boats out of and back into the water

trim: this relates to the way a boat floats in the water

trough: the area of water between the crests of waves and parallel to them

twin-screw craft: a boat with two propellers on two separate shafts

underway: when a boat moves through the water

wake: disrupted water that a boat leaves astern as a result of it's motion

wash: the flow of water that results from the action of her propeller or propellers

water pump: circulates cooling water

waterline: the plane of a boat where the surface of the water touches the hull when it is afloat on even keel

watertight bulkhead: bulkheads secured so tightly so as not to let water pass

wharf: a structure generally parallel to the shore

working anchor: an anchor carried on a boat for most normal uses

yacht basin: a protected facility primarily for recreational small craft

yaw: when a boat runs off her course to either side

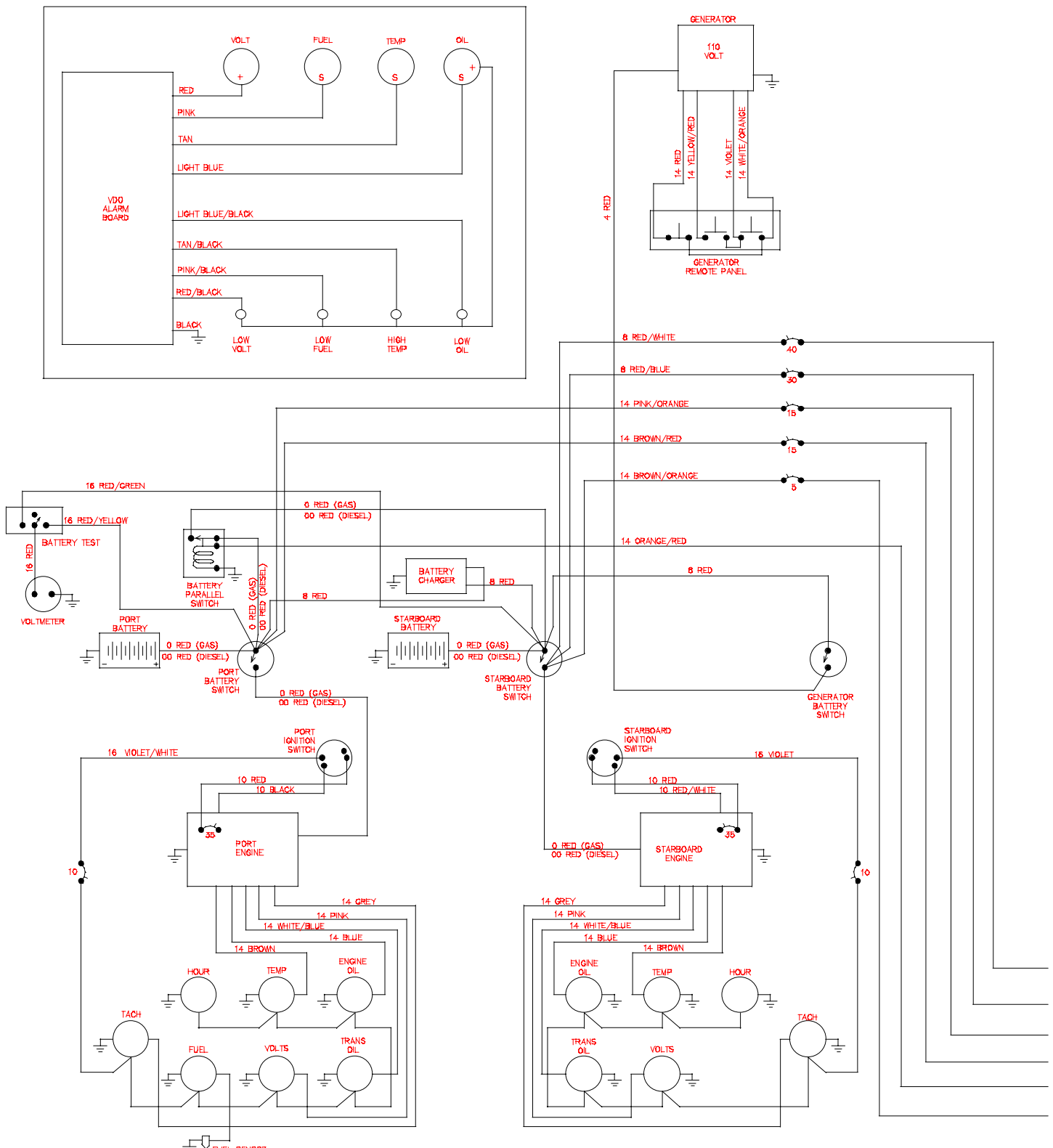
Appendix C

WIRING DIAGRAMS

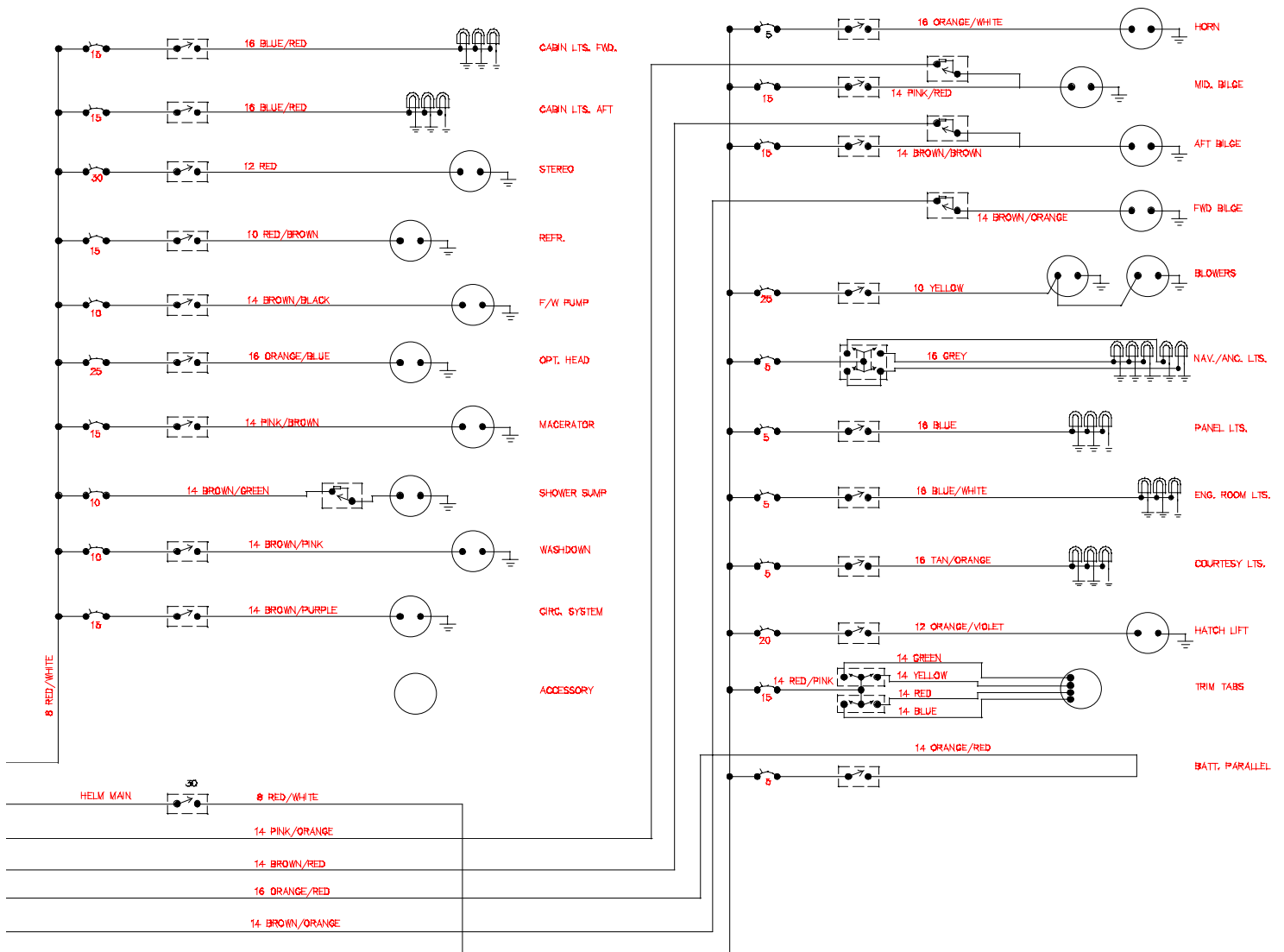
On the following pages are the 12V D.C. and 110V A.C. wiring diagrams.



ADDITIONAL WIRING OR REPAIR OF EXISTING WIRING SHOULD ONLY BE PERFORMED BY A QUALIFIED MARINE ELECTRICIAN. IMPROPER WIRING CAN CAUSE ELECTROCUTION AND FIRES IN BOAT WIRING.



12V D.C. SCHEMATIC



110V A.C. SCHEMATIC

