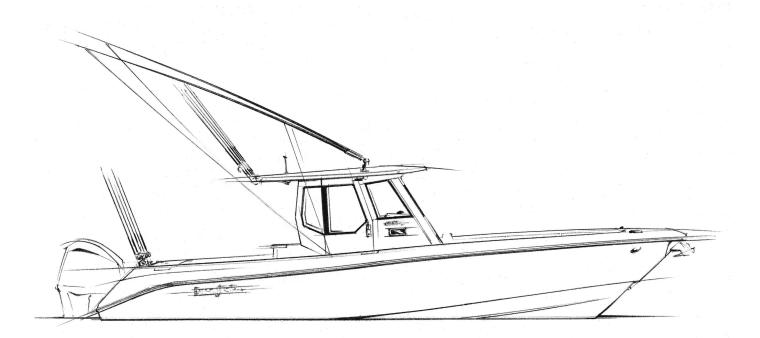
# 295 PILOT 325 PILOT





## **Everglades**<sup>™</sup>

Revision 1 8/26/2012

TABLE OF CONTENTS	3
SAFETY INFORMATION	7
BOAT INFORMATION	8
INTRODUCTION & IMPORTANT INFORMATION	13
OWNER / OPERATOR INFORMATION	15

#### Chapter 1: SAFETY EQUIPMENT

17
17
17
17
17
18
19
20
20
21

#### Chapter 2: OPERATION

2.1	General	23
2.2	Rules of the Road	23
2.3	Pre-Cruise Check	26
2.4	Operating Your Boat	27
2.5	Docking, Anchoring and Mooring	28
	Controls, Steering or Propulsion System Failure	
2.7	Collision	30
2.8	Grounding, Towing and Rendering Assistance	30
2.9	Flooding or Capsizing	31
2.10	) Fishing	
2.11	Crow's Nest (Optional)	32
2.12	2 Man Overboard	32
2.13	3 Water Skiing and Wakeboarding	33
2.14	<ul><li>Water Skiing and Wakeboarding</li><li>Teak Surfing</li></ul>	34
2.15	5 Trash Disposal	35
2.16	5 Trailering Your Boat	35

#### Chapter 3: PROPULSION SYSTEM

3.1	General	.39
	Drive System Corrosion	
3.3	Engine Lubrication	.40
3.4	Engine Cooling System	.40
	Propellers	
3.6	Performance Issues and Propellers	.41
	Engine Instrumentation	

by Dougherty \_

## **Everglades**<sup>™</sup>

#### Chapter 4: HELM CONTROL SYSTEMS

4.1	General	45
4.2	Engine Throttle and Shift Controls	45
4.3	Neutral Safety Switch	46
4.4	Engine Power Tilt and Trim	47
4.5	Engine Stop Switch	47
4.6	Steering System	48
4.7	Trim Tabs	48
4.8	Bow Thruster (Optional)	49
	Control Systems Maintenance	

#### Chapter 5: FUEL SYSTEM

5.1	General	3
5.2	Outboard Fuel System	4
	Fueling Instructions	
5.4	Fuel System Maintenance	6

#### Chapter 6: ELECTRICAL SYSTEM

6.1	General	.57
6.2	DC System Overview	.57
6.3	Batteries and Battery Switches	.57
6.4	DC System Switch and Circuit Breaker Panels	.61
6.5	Bonding System	.67
6.6	AC Electrical System	.68
6.7	Electrical System Maintenance	.70
6.8	DC Power Management	.71

#### Chapter 7: Fresh Water System

7.1	General	73
7.2	Fresh Water System Operation	73
7.3	Fresh Water System Maintenance	74

#### Chapter 8: RAW WATER SYSTEM

8.1	General77
8.2	Raw Water System Operation
8.3	Baitwell
8.4	Air Conditioning Pump
8.5	Raw Water System Maintenance

\_ by Dougherty

#### Chapter 9: DRAINAGE SYSTEMS

9.1	General	81
9.2	Cockpit and Deck Drains	81
9.3	Fishboxes and Forward Storage Compartments	82
	Bilge Drainage	
	Head Compartment Drainage	
	Drainage System Maintenance	

## Chapter 10:

VENI	ILATION SYSTEM	
10.1	Pilot House Ventilation	87
10.2	Head Compartment Ventilation	88
10.3	Bilge Ventilation	89
10.4	Maintenance	89

#### Chapter 11: EXTERIOR EQUIPMENT

11.1	Deck Rails and Deck Hardware	91
11.2	295 Pilot Rope Locker and Windlass	91
11.3	325 Pilot Rope Locker and Windlass	92
11.4	Hull	94
11.5	Cockpit Features All Models	96
11.6	295 Pilot Cockpit Equipment	98
11.7	325 Pilot Cockpit Equipment	101
11.8	Pilot House and Helm	105
11.9	Crow's Nest (Optional)	111

#### Chapter 12: INTERIOR EQUIPMENT

12.1	Head Compartment
12.2	Marine Head System
12.3	Cabin Air Conditioner (Optional)115
	Heating System (Optional)

#### Chapter 13: ROUTINE MAINTENANCE

NO0		
13.1	Exterior Hull and Deck	119
13.2	Upholstery, Canvas and Enclosures	123
13.3	Interior	125
13.4	Bilge, Pumps and Components	125
13.5	Drainage System	126

by Dougherty \_

Chapter 14: SEASONAL MAINTENANCE14.1 Storage and Lay-up12714.2 Winterizing12914.3 Recommissioning131
Appendix A: SCHEMATICS 295 Pilot Wiring Diagram
Appendix B: GLOSSARY OF TERMS
Appendix C: MAINTENANCE LOG
Appendix D: BOATING ACCIDENT REPORT
Appendix E: FLOAT PLAN
Appendix F: TROUBLESHOOTING GUIDE



Your Everglades 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 **DANGER**, **WARNING and CAUTION** statements. The following definitions apply:



IMMEDIATE HAZARDS WHICH WILL RESULT INS SEVERE PERSONAL INJURY OR DEATH.

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.

**IMPORTANT NOTE:** Your boat uses an internal combustion engine and flammable fuel. Every precaution has been taken by Everglades 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.

by Dougherty .

Please fill out the following information section and leave it in your Everglades owner's manual. This information will be important for you, your dealer and/or Everglades service personnel to know, if you may need to call them for technical assistance or service.

		BO	AT		
MODEL:			HULL SER	IAL #:	
PURCHASE DATE:			DELIVERY DATE:		
IGNITION KEYS #:			REGISTRA	TION #:	
WEIGHT:	DRAFT:	BEAM:		VERTICAL CLEARANCE:	
DOOR KEYS #:	•	•		·	
		ENG	INES		
MAKE:			MODEL:		
PORT SERIAL #:			STARBOAR	RD SERIAL #:	
		TRA	ILER		
MAKE:			MODEL:		
SERIAL #:			GVWR:		
TIRE SIZE:					
		ΟΡΤΙ	ONS		
	F	PROPE	LLERS		
MAKE:			BLADES:		
DIAMETER/PITCH:			SHAFT:		
		NO	TES		
	EALER		PHONE:	EVERGLADES	
NAME: DEALER/PHONE:			PHONE: REPRESEN		
SALESMAN:			ADDRESS:		
SERVICE MANAGER	<b>.</b>		ADDRE35:		
ADDRESS:	ν.				
DEALER E-MAIL:			EVERGLADES	E-MAIL:	

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of publication. Everglades Boats reserves the right to make changes at anytime, without notice, in colors, materials, equipment, specifications and models.

\_ by Dougherty

**Everglades**<sup>™</sup>

## **SPECIFICATIONS**

**Everglades**<sup>®</sup>

#### 295 Pilot Specifications

HULL LENGTH OVERALL W/ ENGINE	31' 3"
BEAM	
WEIGHT DRY - NO ENGINES	6,300
DEAD RISE	21°
DRAFT WITH ENGINES UP	20"
DRAFT WITH ENGINES DOWN	33"
TRANSOM HEIGHT	25"
BRIDGE CLEARANCE TOP OF HARDTOP	
FUEL CAPACITY	200 gal
WATER TANK CAPACITY	25 gal
WASTE TANK CAPACITY	9 gal
MAXIMUM HORSEPOWER	700 hp
MAXIMUM PERSONS CAPACITY	14
MAXIMUM PERSONS / GEAR WEIGHT	4,000 lbs
SLING LOCATIONS - AFT (inches from aft rubrail)	38"
SLING LOCATIONS - FORWARD (inches forward of aft sling location	144"

Notice: Dry weight is the average weight of the base boat without engines, fuel, water, waste or gear.

Specifications and weights are approximate and may differ from boat to boat.

by Dougherty \_\_\_\_\_

**Everglades**<sup>™</sup>

### 325 Pilot Specifications

HULL LENGTH OVERALL W/ ENGINE	35'
BEAM	10' 8"
WEIGHT DRY - NO ENGINES	9,300
DEAD RISE	25°
DRAFT WITH ENGINES UP	24"
DRAFT WITH ENGINES DOWN	36"
TRANSOM HEIGHT	30"
BRIDGE CLEARANCE TOP OF HARDTOP	8' 9"
FUEL CAPACITY	327 gal
WATER TANK CAPACITY	35 gal
WASTE TANK CAPACITY	9 gal
MAXIMUM HORSEPOWER	700 hp
MAXIMUM PERSONS CAPACITY	14
MAXIMUM PERSONS / GEAR WEIGHT	5,200 lbs
SLING LOCATIONS - AFT (inches from aft rubrail)	57"
SLING LOCATIONS - FORWARD (inches forward of aft sling location	150"

#### Notice:

Dry weight is the average weight of the base boat without engines, fuel, water, waste or gear.

Specifications and weights are approximate and may differ from boat to boat.

## **CERTIFICATIONS & SPECIFICATIONS**

## **Everglades**<sup>®</sup>

#### 295 Pilot Export Documentation

### (For Export Only)

To be in compliance with European directives for recreational boats as published by the International Organization for Standardization (ISO) in effect at the time this boat was manufactured, we are providing the following information.

#### Manufacturer:

Name	Evergl	ades Boats				
	544 Air Park Road					
	Edgew	ater, FL		Zip Code:	32132	
Identifica	ation Nu	imbers:				
Hull Identifica	Hull Identification Number					
Engine Seria	l Number					
Intended Design Category:						
		Ocean (Cat A)		Inshore (Cat C)		
		Offshore (Cat B)		Sheltered Waters (Ca	t D)	
Weight and Maximum Capacities:						
Unladen Weight - Kilograms (Pounds)						
Maximum Load - Weight- Kilograms (Pounds)						
Number of People						
Maximum Rated Engine Horsepower - Kilowatts (Horsepower)						
Certifica	tions:					
Certifications	& Compon	ents Covered	See	Declaration of Conformit	/	

by Dougherty \_

## **CERTIFICATIONS & SPECIFICATIONS**

## **Everglades**<sup>™</sup>

325 Pilot Export Documentation

### (For Export Only)

To be in compliance with European directives for recreational boats as published by the International Organization for Standardization (ISO) in effect at the time this boat was manufactured, we are providing the following information.

#### Manufacturer:

Name	Everglades Boats							
_	544 Air	Park Road						
-	Edgew	ater, FL			Zip Code:	32132		
Identifica	tion Nu	imbers:						
Hull Identifica	tion Numb	er						
Engine Serial Number								
-		_						
Intended	Design	Catego	ory:					
		Ocean (	Cat A)		Inshore (Cat C)			
		Offshore	(Cat B)		Sheltered Waters (	Cat D)		
Weight a	nd Max	imum C	apacities	5:				
Unladen Weight - Kilograms (Pounds)								
Maximum Load - Weight- Kilograms (Pounds)								
Number of People								
Maximum Rated Engine Horsepower - Kilowatts (Horsepower)								
Certificat	ions:							
Certifications	& Compon	ents Covere	ed –	See I	Declaration of Conform	nity		

by Dougherty

**Everglades**<sup>®</sup>

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. The information and precautions listed in this manual are not all inclusive. It may be general in nature in some cases and detailed in others and is designed to provide you a basic understanding of your Everglades boat and some of the responsibilities that go along with owning/operating your boat.

The suppliers of some of the major components such as the engines, pumps and appliances, provide their own owner's manuals which have been included with your boat. You should read the information in this manual and the manuals of other suppliers completely and have a thorough understanding of all component systems and their proper operation before operating your boat.

REMEMBER - IT IS YOUR RESPONSIBILITY TO ENSURE THAT YOUR BOAT IS SAFE FOR YOU AND YOUR PASSENGERS. ALWAYS EXERCISE GOOD COMMON SENSE WHEN INSTALLING EQUIPMENT AND OPERATING THE BOAT.

#### Warranty and Warranty Registration Cards

The Everglades Limited Warranty Statement is included with your boat. It has been written to be clearly stated and easily understood. If you have any questions after reading the warranty, please contact the Everglades Boats Customer Service Department

Everglades, engine manufacturers and the suppliers of major components maintain their own manufacturer's warranty and service facilities. It is important that you properly complete the warranty registration cards included with your boat and engine and mail them back to the manufacturer to register your ownership. This should be done within 15 days of the date of purchase and before the boat is put into service. A form for recording this information for your records is provided at the beginning of this manual. This information will be important for you and service personnel to know, if and when you may need service or technical information.

The boat warranty registration requires the **H**ull **I**dentification **N**umber **"HIN"** which is located on the starboard side of the transom, just below the rubrail. The engine warranty registration requires the engine serial numbers. Please refer to the engine owner's manual for the location of the serial numbers.



Hull ID # On Starboard Side of Transom

#### **IMPORTANT:**

The terms and conditions of the Everglades Boats Limited Warranty are outlined in the warranty statement included in this manual. The manufacturer will automatically honor the warranty to the original purchaser for 15 days from the date of purchase. However, during that 15 day period, owners must comply with the steps outlined in the warranty statement to validate their warranty.

All boat manufacturers are required by the Federal Boat Safety Act of 1971 to notify first time owners in the event any defect is discovered "which creates a substantial risk of personal injury to the public." *It is essential that we have your warranty registration card complete with your name and mailing address in our files so that we can comply with the law if it should become necessary.* 

Your Everglades Boats Dealer will assist you in filling in the hull number and other data required on your Registration Card. Check to see that your card is complete and signed. Detach and mail. Your Warranty Registration Card will be added to our permanent files.

by Dougherty .

**Everglades**<sup>®</sup>

#### **Transferring the Limited Structural Warranty**

For a transfer fee, Everglades Boats will offer to extend a Transferable Limited Structural Hull Warranty to subsequent owners of Everglades Boats. Please refer to the Everglades Limited Warranty Statement for the terms and conditions of the Transferable Limited Structural Hull Warranty and the procedure to transfer the warranty.

#### **Product Changes**

Everglades is committed to the continuous improvement of our boats. As a result, some of the equipment described in this manual or pictured in the catalog may change or no longer be available. *All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of publication. Everglades Boats reserves the right to make changes at anytime, without notice, in colors, materials, equipment, specifications and models.* If you have questions about the equipment on your Everglades, please contact the Everglades Boats Customer Service Department.

#### Service

All warranty repairs must be performed by an authorized Everglades Dealer. Should a problem develop that is related to faulty workmanship or materials, as stated in the Limited Warranty, you should contact your Everglades dealer to arrange for the necessary repair. If you are not near your dealer or another authorized Everglades dealer or the dealer fails to remedy the cause of the problem, then contact Everglades within 15 days.

*Everglades will not reimburse boat owners for warranty repairs performed without prior authorization provided in writing.* 

It is the boat owner's responsibility to deliver the boat to the dealer for warranty service.

by Dougherty

#### **Registration and Numbering**

Federal law requires that all undocumented vessels equipped with propulsion machinery be registered in the State of principal use. A certificate of number will be issued upon registering the boat. These numbers must be displayed on your boat. The owner/operator of a boat must carry a valid certificate of number whenever the boat is in use. When moved to a new State of principal use, the certificate is valid for 60 days.

In order to be valid, the numbers must be installed to the proper specifications. Check with your dealer or state boating authority for numbering requirements. The Coast Guard issues the certificate of number in Alaska; all others are issued by the state.

#### Insurance

In most States the boat owner is legally responsible for damages or injuries he or someone else operating the boat causes. Responsible boaters carry adequate liability and property damage insurance for their boat. You should also protect the boat against physical damage and theft. Some States have laws requiring minimum insurance coverage. Contact your dealer or state boating authority for information on the insurance requirements in your boating area.

#### **Reporting Boating accidents**

All boating accidents must be reported by the operator or owner of the boat to the proper marine law enforcement authority for the state in which the accident occurred. Immediate notification is required if a person dies or disappears as a result of a recreational boating accident.

If a person dies or there are injuries requiring more than first aid, a formal report must be filed within 48 hours.

A formal report must be made within 10 days for accidents involving more than \$500.00 damage or the complete loss of a boat.

A Boating Accident Report form is located near the back of this manual to assist you in reporting an accident. If you need additional information regarding accident reporting, please call the Boating Safety Hotline, 800-368-5647.

#### Education

If you are not an experienced boater, we recommend that the boat operator and other people that normally accompany the operator, enroll in a boating safety course. Organizations such as the U.S. Power Squadrons, United States Coast Guard Auxiliary, State Boating Authorities and the American Red Cross offer excellent boating educational programs. These courses are worthwhile even for experienced boaters to sharpen your skills or bring you up to date on current rules and regulations. They can also help in providing local navigational information when moving to a new boating area. Contact your dealer, State Boating Authority or the Boating Safety Hotline, 800-368-5647 for further information on boating safety courses.

#### **Required Equipment**

U.S. Coast Guard regulations require certain equipment on each boat. The Coast Guard also sets minimum safety standards for vessels and associated equipment. To meet these standards some of the equipment must be Coast Guard approved. "Coast Guard Approved Equipment" has been determined to be in compliance with USCG specifications and regulations relating to performance, construction or materials. The equipment requirements vary according to the length, type of boat and the propulsion system. Some of the Coast Guard equipment is described in the Safety Equipment chapter of this manual. For a more detailed description, obtain "Federal Requirements And Safety Tips For Recreational Boats" by contacting the Boating Safety Hotline 800-368-5647 or your local marine dealer or retailer.

Some state and local agencies impose similar equipment requirements on waters that do not fall under Coast Guard jurisdiction. These agencies may also require additional equipment that is not required by the Coast Guard. Your dealer or local boating authority can provide you with additional information for the equipment requirements for your boating area.

by Dougherty \_

THIS PAGE WAS LEFT BLANK INTENTIONALLY



### SAFETY EQUIPMENT

#### 1.1 General

Your boat and outboard engines have been equipped with safety equipment designed to enhance the safe operation of the boat and to meet U.S. Coast Guard safety standards. The Coast Guard or state, county and municipal law enforcement agencies require certain additional accessory safety equipment on each boat. This equipment varies according to length and type of boat and type of propulsion. The accessory equipment typically required by the Coast Guard is described in this chapter. Some local laws require additional equipment. It is important to obtain "Federal Requirements And Safety Tips for Recreational Boats," published by the Coast Guard and copies of state and local laws, to make sure you have the required equipment for your boating area.

Your boat is equipped with engine alarms. The alarm systems are designed to increase your boating safety by alerting you to potentially serious problems in the primary power system. Alarm systems are not intended to lessen or replace good maintenance and Pre-Cruise procedures.

This chapter also describes safety related equipment that could be installed on your boat. This equipment will vary depending on the type of engines and other options installed by you or your dealer.

#### 1.2 Engine Alarms

Most outboard engines are equipped with an audible alarm system mounted in the helm area that monitors selected critical engine systems. The alarm will sound if one of these systems begins to fail. Refer to the engine owner's manual for information on the alarms installed with your engines.

#### If the alarm sounds:

- Immediately throttle the engines back to idle.
- Shift the transmissions to neutral.
- Monitor the engine gauges to determine the cause of the problem.
- If necessary, shut off the engine and investigate until the cause of the problem is found.

Throwable Device and Personal PFD

#### 1.3 Neutral Safety Switch

Every control system has a neutral safety switch incorporated into it. This device prohibits the engines from being started while the shift levers are in any position other than the neutral position. If an engine will not start, slight movement of the shift lever may be necessary to locate the neutral position and disengage the safety cutout switch. Control adjustments may be required to correct this condition should it persist. See your Everglades dealer for necessary control adjustments. Please refer to the Helm Control Systems chapter for more information on the neutral safety switch.

#### 1.4 Engine Stop Switch

Your boat is equipped with a engine stop switch and lanyard. When the lanyard is pulled it will engage the switch and shut off the engines. We strongly recommend that the lanyard be attached to the driver and the stop switch whenever the engines are running. If the engines will not start, it could be because the lanyard is not properly inserted into the engine stop switch. Always make sure the lanyard is properly attached to the engine stop switch before attempting to start the engine.

#### Notice:

In some states, a lanyard attached to the driver at all times is required by law.

by Dougherty \_

### Safety Equipment



#### Notice:

You should carry an extra stop switch lanyard and instruct at least one other crew member on the operation of the stop switch and location of the extra lanyard.

#### 1.5 Required Safety Equipment

Besides the equipment installed on your boat by Everglades, certain other equipment is required by the U.S. Coast Guard to help ensure passenger safety. Items like a sea anchor, working anchor, extra dock lines, flare pistol, life vests, a line permanently secured to your ring buoy, etc., could at some time save your passengers' lives or save your boat from damage. Refer to the "Federal Requirements And Safety Tips For Recreational Boats" pamphlet for a more detailed description of required equipment. You also can contact the U.S. Coast Guard Boating Safety Hotline, 800-368-5647, for information on boat safety courses and brochures listing the Federal equipment requirements. Also, check your local and state regulations.

The Coast Guard Auxiliary offers a "Courtesy Examination." This inspection will help ensure that your boat is equipped with all of the necessary safety equipment. The following is a list of the accessory equipment required on your boat by the U.S. Coast Guard:

#### **Personal Flotation Devices (PFDs)**

PFDs must be Coast Guard approved, in good and serviceable condition and of appropriate size for the intended user. Wearable PFDs must be readily accessible, meaning you must be able to put them on in a reasonable amount of time in an emergency. Though not required, the Coast Guard emphasizes that PFDs should be worn at all times when the vessel is underway. Throwable devices must be immediately available for use. All Everglades boats must be equipped with at least one Type I, II or III PFD for each person on board, plus one throwable device (Type IV).

#### Notice:

Many state laws now require that children 13 years old and under must wear a PFD at all times.

Anyone being towed on skis, wakeboards and other water sports equipment is considered a passenger on the boat and must wear a Coast Guard approved life jacket at all times.

#### Visual Distress Signals

All boats used on coastal waters, the Great Lakes, territorial seas and those waters connected directly to them, must be equipped with Coast Guard approved visual distress signals. These signals are either Pyrotechnic or Non-Pyrotechnic devices.

#### **Pyrotechnic Visual Distress Signals:**

Pyrotechnic visual distress signals must be Coast Guard approved, in serviceable condition and readily accessible. They are marked with a date showing the service life, which must not have expired. A minimum of three are required. Some pyrotechnic signals meet both day and night use requirements. They should be stored in a cool, dry location. They include:

- Pyrotechnic red flares, hand held or aerial.
- Pyrotechnic orange smoke, hand-held or floating.
- Launchers for aerial red meteors or parachute flares.

PYROTECHNICS ARE UNIVERSALLY RECOGNIZED AS EXCELLENT DISTRESS SIGNALS. HOWEVER, THERE IS POTENTIAL FOR INJURY AND PROPERTY DAMAGE IF NOT PROPERLY HANDLED. THESE DEVICES PRODUCE A VERY HOT FLAME AND THE RESIDUE CAN CAUSE BURNS AND IGNITE FLAMMABLE MATERIAL. PISTOL LAUNCHED AND HAND-HELD PARACHUTE FLARES AND METEORS HAVE MANY CHARACTERISTICS OF A FIREARM AND MUST BE HANDLED WITH CAUTION. IN SOME STATES THEY ARE CONSIDERED A FIREARM AND PROHIBITED FROM USE. ALWAYS BE EXTREMELY CAREFUL AND FOLLOW THE MANUFACTURER'S INSTRUCTIONS EXACTLY WHEN USING PYROTECHNIC DISTRESS SIGNALS.

#### **Non-Pyrotechnic Devices**

Non-Pyrotechnic visual distress signals must be in serviceable condition, readily accessible and certified by the manufacturer as complying with U.S. Coast Guard requirements. They include:

• Orange Distress Flag (Day use only)

The distress flag is a day signal only. It must be at least  $3 \times 3$  feet with a black square and ball on an orange background. It is most distinctive when attached and waved from a paddle or boat hook.



### Safety Equipment

## **Everglades**<sup>®</sup>

• Electric Distress Light (Night use only)

The electric distress light is accepted for night use only and must automatically flash the international SOS distress signal. Under "Inland Navigation Rules," a high intensity white light flashing at regular intervals from 50-70 times per minute is considered a distress signal.

#### **Sound Signaling Devices**

The navigation rules require sound signals to be made under certain circumstances. Recreational vessels also are required to sound fog signals during periods of reduced visibility. Therefore, you must have some means of making an efficient sound signal.

#### **Navigation Lights**

Recreational boats are required to display navigation lights between sunset and sunrise and other periods of reduced visibility (fog, rain, haze, etc.) Navigation lights are intended to keep other vessels informed of your presence and course. Your boat is equipped with navigation lights required by the U.S. Coast Guard at the time of manufacture. It is up to you to make sure they are operational and turned on when required.

#### **Fire Extinguishers**

Boats over 26 feet are required to carry one or two fire extinguishers, depending on the type of fire extinguishers used. Coast Guard approved fire extinguishers are hand-portable, either B-I or B-II classification and have a specific marine type mounting bracket. It is recommended that the extinguishers be mounted in a readily accessible position.



## Fire extinguishers require regular inspections to ensure that:

- Seals & tamper indicators are not broken or missing.
- Pressure gauges or indicators read in the operable range.
- There is no obvious physical damage, corrosion, leakage or clogged nozzles.

Refer to the "Federal Requirements And Safety Tips For Recreational Boats" pamphlet or contact the U.S. Coast Guard Boating Safety Hotline, 800-368-5647, for information on the type and size fire extinguisher required for your boat.

Please refer to the information provided by the fire extinguisher manufacturer for instructions on the proper maintenance and use of your fire extinguisher.



INFORMATION FOR AGENT FE-241 AND FE-227 FIRE EXTINGUISHERS IS PROVIDED BY THE MANUFACTURER. IT IS ESSENTIAL THAT YOU READ THE INFORMATION CAREFULLY AND COMPLETELY UNDERSTAND THE SYSTEM, IN THEORY AND OPERATION, BEFORE USING YOUR BOAT.

#### 1.6 Bilge and Fuel Fires

Fuel compartment and bilge fires are very dangerous because of the presence of gasoline in the various components of the fuel system and the possibility for explosion. You must make the decision to fight the fire or abandon the boat. If the fire cannot be extinguished quickly or it is too intense to fight, abandoning the boat may be your only option.

If you find yourself in this situation, make sure all passengers have a life preserver on, go over the side and swim well upwind of the boat. This will keep you and your passengers well clear of any burning fuel that could be released and spread on the water as the boat burns or in the event of an explosion. When clear of the danger, check about and account for all those who were aboard with you. Give whatever assistance you can to anyone in need or in the water without a buoyant device. Keep everyone together in a group for morale and to aid rescue operations.



ALL TYPES OF FUEL CAN EXPLODE. IN THE EVENT OF A FUEL COMPARTMENT OR BILGE FIRE, YOU MUST MAKE THE DIFFICULT DECISION TO FIGHT THE FIRE OR ABANDON THE BOAT. YOU MUST CONSIDER YOUR SAFETY, THE SAFETY OF YOUR PASSENGERS, THE INTENSITY OF THE FIRE AND THE POSSIBILITY OF AN EXPLOSION IN YOUR DECISION.

by Dougherty

## Safety Equipment

## **Everglades**<sup>®</sup>

### 1.7 First Aid

It is the operator's responsibility to be familiar with the proper first-aid procedures and be able to care for minor injuries or illnesses of your passengers. In an emergency, you could be far from professional medical assistance. We strongly recommend that you be



prepared by receiving training in basic first aid and CPR. This can be done through classes given by the Red Cross or your local hospital.

Your boat should also be equipped with at least a simple marine first-aid kit and a first-aid manual. The marine first-aid kit should be designed for the marine environment and be well supplied. It should be accessible and each person on board should be aware of its location. As supplies are used, replace them promptly. Some common drugs and antiseptics may lose their strength or become unstable as they age. Ask a medical professional about the supplies you should carry and the safe shelf life of prescription drugs or other medical supplies that may be in your first-aid kit. Replace questionably old supplies whether they have been used or not.

In many emergency situations, the Coast Guard can provide assistance in obtaining medical advice for treatment of serious injuries or illness. If you are within VHF range of a Coast Guard Station, make the initial contact on channel 16 and follow their instructions.

#### 1.8 Additional Safety Equipment

Besides meeting the legal requirements, prudent boaters carry additional safety equipment. This is particularly important if you operate your boat offshore. You should consider the following items, depending on how you use your boat.

#### Satellite EPIRBS

EPIRBs (Emergency Position Indicating Radio Beacon) operate as part of a worldwide distress system. When activated, EPIRBs will send distress code homing beacons that allow Coast Guard aircraft to identify and find them quickly. The satellites that receive and relay EPIRB signals are operated by the National Oceanic and Atmospheric Administration (NOAA) in the United States. The EPIRB should be mounted and registered according to the instructions provided with the beacon, so that the beacon's unique distress code can be used to quickly identify the boat and owner.

#### **Marine Radio**

A marine radio is the most effective method of receiving information and requesting assistance. VHF marine radios are used near shore and single sideband radios are used for long range communication.

There are specific frequencies to use in an emergency. The VHF emergency channel is 16 in the United States. You should read the owners manual for your radio and know how to use it in an emergency or for normal operation. If you hear a distress call you should assist or monitor the situation until help is provided.

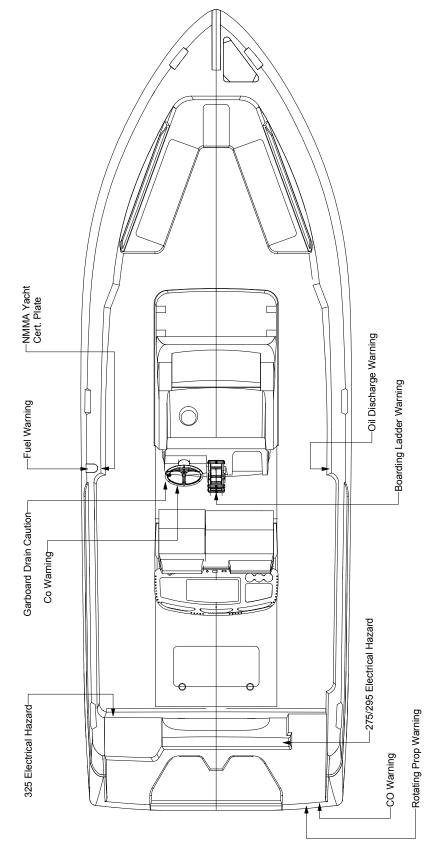
#### Additional Equipment to Consider:

Cell Phone	Spare Anchor
Fenders	Heaving Line
Mirror	First Aid Kit
Tool Kit	Flashlight & Batteries
Anchor	Search light
Boat Hook	Sunburn Lotion
Mooring Lines	Ring Buoy or Boat Cushion
Binoculars	Whistle or Horn
Extra Clothing	Portable Radio
Chart and Compass	Marine Hardware
Food & Water	Spare Keys
Sunglasses	Spare Parts
Spare Propellers	Spare Propeller Hub Kits





**1.9 Caution and Warning Labels** The caution and warning labels shown are examples of the labels that could be on your boat. The actual labels and their location could vary on your boat.



THIS PAGE WAS LEFT BLANK INTENTIONALLY

## Chapter 2: OPERATION

#### 2.1 General

Before you start the engines on your Everglades, you should have become familiar with the various component systems and their operation and have performed a "Pre-Cruise System Check." A thorough understanding of the component systems and their operation is essential to the proper operation of the boat. This manual and the associated manufacturers' information is provided to enhance your knowledge of your boat. Please read them carefully.

Your boat must have the necessary safety equipment on board and be in compliance with the U.S. Coast Guard, local and state safety regulations. There should be one Personal Flotation Device (PFD) for each person. Non-swimmers and small children should wear PFDs at all times. You should know and understand the "Rules of the Road" and have had an experienced operator brief you on the general operation of your new boat. At least one other person should be instructed on the proper operation of the boat in case the operator is suddenly incapacitated.

The operator is responsible for his safety and the safety of his passengers. When boarding or loading the boat, always step onto the boat, never jump. All passengers should be properly seated whenever the boat is operated above idle speed. Your passengers should not be allowed to sit on the seat backs, gunnels, bows or transoms whenever the boat is underway. The passengers should also be seated to properly balance the load and must not obstruct the operator's view, particularly to the front.

Overloading and improper distribution of weight can cause the boat to become unstable and are significant causes of accidents. Know the weight capacity and horsepower rating of your boat. Do not overload or overpower your boat.

You should be aware of your limitations and the limitations of your boat in different situations or sea conditions. No boat is indestructible, no matter how well it is constructed. Any boat can be severely damaged if it is operated in a manner that exceeds its design limitations. If the ride is hard on you and your passengers, it is hard on the boat as well. Always modify the boat speed in accordance with the sea conditions, boat traffic and weather conditions.

Remember, it is the operator's responsibility to use good common sense and sound judgement in loading and operating the boat.

#### 2.2 Rules of the Road

As in driving an automobile, there are a few rules you must know for safe boating operation. The following information describes the basic navigation rules and action to be taken by vessels in crossing, meeting or overtaking situations while operating in inland waters. These are basic examples and not intended to teach all the rules of navigation. For further information consult the "Navigation Rules" or contact the Coast Guard, Coast Guard Auxiliary, Department of Natural Resources or your local boat club. These organizations sponsor courses in boat handling, including rules of the road. We strongly recommend such courses. Books or videos on this subject also are available from your local library.

#### Notice:

Sailboats not under power, paddle boats, vessels unable to maneuver, vessels engaged in commercial fishing and other vessels without power have the right-of-way over motor powered boats. You must stay clear or pass to the stern of these vessels. Sailboats under power are considered motor boats.

#### **Crossing Situations**

When two motor boats are crossing, the boat on the right has the right-of-way. The boat with the right-of-way should maintain its course and speed. The other vessel should slow down and permit it to pass. The boats should sound the appropriate signals.

#### Meeting Head-On or Nearly-So Situations

When two motor boats are approaching each other head-on or nearly head-on, neither boat has the right-of-way. Both boats should reduce their speed and turn to the right so as to pass port side to port side, providing enough clearance for safe passage. The boats should sound the appropriate signals.

by Dougherty \_

## **Everglades**<sup>®</sup>

#### **Overtaking Situations**

When one motor boat is overtaking another motor boat, the boat that is being passed has the right-of-way. The overtaking boat must make the adjustments necessary to provide clearance for a safe passage of the other vessel. The boats should sound the appropriate signals.

#### The General Prudential Rule

In obeying the Rules of the Road, due regard must be given to all dangers of navigation and collision and to any special circumstances, including the limitations of the vessels, which may justify a departure from the rules that is necessary to avoid immediate danger or a collision.

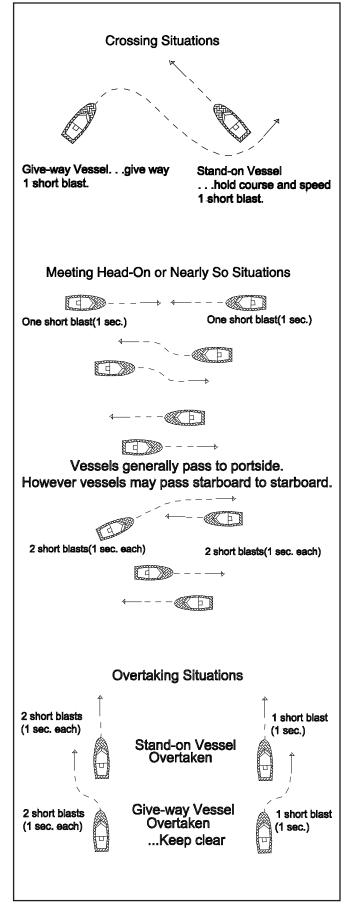
#### **Night Operation**

Recreational boats are required to display navigation lights between sunset and sunrise and other periods of reduced visibility such as fog, rain, haze, etc. When operating your boat at night you should:

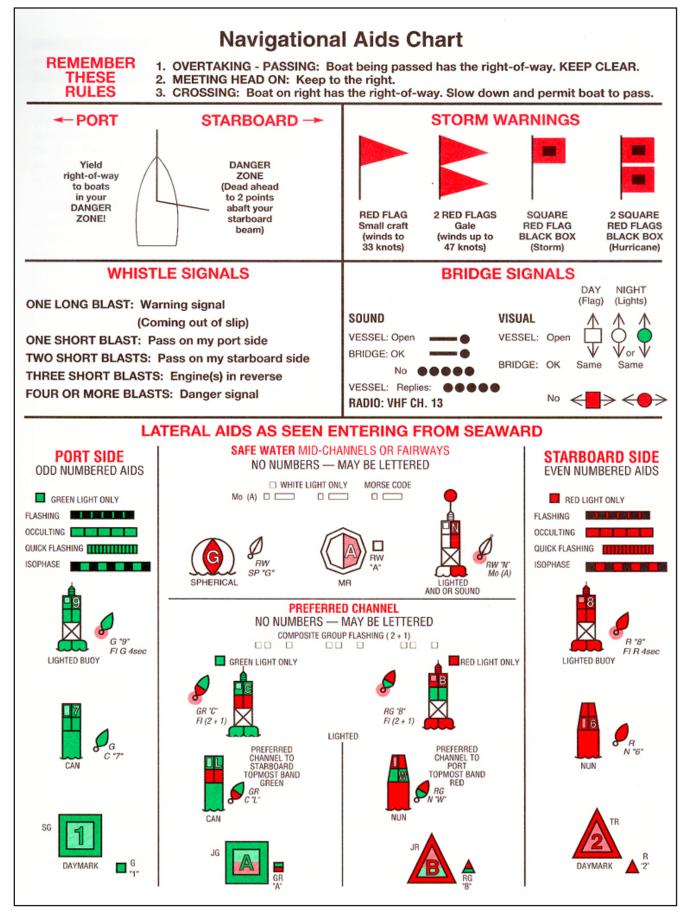
- Make sure your navigation lights are on and working properly. Navigation lights warn others of your position and course and the position and course of other vessels.
- All navigation rules apply. If the bow light of another vessel shows red, you should give way to that vessel, if it shows green, you have the right-of-way.
- Slow down and never operate at high speeds when operating at night, stay clear of all boats and use good common sense. Always be ready to slow down or steer clear of other vessels, even if you have the right-of-way.
- Avoid bright lights that can destroy night vision, making it difficult to see navigation lights and the lights of other boats. You and your passengers should keep a sharp lookout for hazards, other boats and navigational aids.

#### **Navigation Aids**

Aids to navigation are placed along coasts and navigable waters as guides to mark safe water and to assist mariners in determining their position in relation to land and hidden dangers. Each aid to navigation is used to provide specific information. You should be familiar with these and any other markers used in your boating area.



by Dougherty





#### Notice:

Storms and wave action can cause buoys to move. You should not rely on buoys alone to determine your position.

#### 2.3 **Pre-Cruise Check** Before Starting the Engines:

#### Check the weather forecast and sea conditions before leaving the dock. Decide if the planned

- before leaving the dock. Decide if the planned cruise can be made safely.
- Be sure all required documents are on board.
- Be sure all necessary safety equipment is on board and operative. This should include items like the running lights, spotlight, life saving devices, etc. Please refer to the Safety Equipment chapter for additional information on safety equipment.
- Make sure you have signal kits and flare guns aboard and they are current and in good operating condition.
- Be sure you have sufficient water and other provisions for the planned cruise.
- Leave a written message listing details of your planned cruise with a close friend ashore (Float Plan). The float plan should include a description of your boat, where you intend to cruise and a schedule of when you expect to arrive in the cruising area and when you expect to return. Keep the person informed of any changes in your plan to prevent false alarms. This information will tell authorities where to look and the type of boat to look for in the event you fail to arrive.
- Check the amount of fuel on board. Observe the "Rule of Thirds": one third of the fuel for the trip out, one third to return and one third in reserve. An additional 15% may be consumed in rough seas.
- Check the water separating fuel filters for leaks or corrosion.
- Check the crankcase oil level in each engine.
- Turn the battery switches on.
- Check the bilge water level. Look for other signs of potential problems. Monitor for the scent of fuel fumes.

- Test the automatic and manual bilge pump switches to make sure the systems are working properly. This is particularly important before running offshore.
- Have a tool kit aboard. The kit should include the following basic tools:

Hammer	Electrician's tape
Screwdrivers	Offset screwdrivers
Lubricating oil	Pliers
Jackknife	Adjustable wrench
Basic 3/8" ratchet set	Vise grip pliers
Hex key set	Needle nose pliers
Wire crimping tool	Wire connector Set
End wrench set	Medium slip-joint pliers
Diagonal cutting pliers	DC electrical test light



THERE MUST BE AT LEAST ONE PERSONAL FLOTATION DEVICE ON BOARD FOR EVERY PERSON ON BOARD AND ONE THROW-OUT FLOTATION DEVICE. CHECK THE U.S. COAST GUARD STANDARDS FOR THE CORRECT TYPE OF DEVICE FOR YOUR BOAT.

• Have the following spare parts on board:

Extra light bulbs	Spark plugs
Fuses and circuit breakers	Main 12 volt fuses
Assorted stainless screws	Assorted stainless bolts
Flashlight and batteries	Drain plugs
Engine oil	Propellers
Fuel filters	Propeller hub kits
Fuel hose and clamps	Wire ties
Assorted hose clamps	Hydraulic steering Fluid
Steering fluid	Rags

- Make sure all fire extinguishers are in position and in good operating condition.
- Check the engine and steering controls for smooth and proper operation. Be sure the shift controls are in the neutral position.
- Be sure the emergency stop lanyard is attached to the operator and the stop switch.



**Everglades**<sup>®</sup>

• Refer to the engine owner's manual for preoperation checks specific to your engines.

#### **2.4 Operating Your Boat** After Starting the Engines:

- Visibly check the engines to be sure there are no apparent water, fuel or oil leaks.
- Check the operation of the engine cooling systems by monitoring the water flowing from the bypass ports.
- Check the engine gauges. Make sure they are reading normally.
- Check the controls and steering for smooth and proper operation.
- Make sure all lines, cables, anchors, etc. for securing a boat are on board and in good condition. All lines should be coiled, secured and off the decks when underway.
- Have a safe cruise and enjoy yourself.

#### **Remember:**

When you operate a boat, you accept the responsibility for the boat, for the safety of passengers and for others out enjoying the water.

- Alcohol and any drugs can severely reduce your reaction time and affect your better judgement.
- Alcohol severely reduces the ability to react to several different signals at once.
- Alcohol makes it difficult to correctly judge speed and distance or track moving objects.
- Alcohol reduces night vision and the ability to distinguish red from green.

🚹 WARNING 🥂

YOU SHOULD NEVER OPERATE YOUR BOAT WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.

• Make sure one other person on the boat is instructed in the operation of the boat.

Make sure the boat is operated in compliance with all state and local laws governing the use of a boat.



DO NOT OPERATE THE BOAT UNLESS IT IS COMPLETELY ASSEMBLED. KEEP ALL FASTENERS TIGHT. KEEP ADJUSTMENTS ACCORDING TO SPECIFICATIONS.



FAILURE TO FOLLOW THE BREAK-IN PROCEDURE MAY RESULT IN REDUCED ENGINE LIFE OR EVEN SEVERE ENGINE DAMAGE IN YOUR OUTBOARD ENGINES. MAKE SURE YOU FOLLOW THE BREAK-IN PROCEDURE EXACTLY.

- Avoid sea conditions that are beyond the skill and experience of you and your crew. Learn to understand weather patterns and indications for change. You should monitor NOAA weather broadcasts before leaving port and periodically while boating. If the weather deteriorates or a storm approaches, seek shelter in a safe harbor.
- Use caution during periods of reduced visibility due to weather or operation conditions. Reduce speed and designate a passenger to be a lookout for other boats, obstacles and navigational markers until you reach port or conditions improve.
- Your Everglades is a heavy boat that will produce a large wake at certain speeds. You are responsible for damage and injury caused by your boat's wake. Always observe No-Wake zones and be aware that your wake can endanger small vessels and their passengers. Always be courteous and slow down to reduce your wake when passing smaller boats.
- Before operating the boat for the first time, read the engine break-in procedures. The break-in procedures are found in the owner's manual for the engines. The manual is in the literature packet.

by Dougherty.

 As different types of engines are used to power the boat, have the dealer describe the operating procedures for your boat. For more instructions on "How To Operate The Boat," make sure you read the instructions given to you in the owner's manual for the engines you have selected.

#### Notice:

For more instructions on safety, equipment and boat handling, enroll in one of the several free boating courses offered. For information on the courses offered in your area, call the "Boating Course Hotline," 1-800-368-5647 or on the WEB at www.uscgboating.org.

#### Notice:

If the running gear hits an underwater object, stop the engines. Inspect the propulsion system for damage. If the system is damaged, contact your dealer for a complete inspection and repair of the unit.

#### To stop the boat, follow this procedure:

- Allow the engines to drop to the idle speed.
- Make sure the shifting levers are in the neutral position.

#### Notice:

If the engines have been run at high speed for a long period of time, allow the engines to cool down by running the engines in the idle position for 3 to 5 minutes.

- Turn the ignition keys to the "OFF" position.
- Raise the trim tabs to the full up position.

#### **After Operation:**

- If operating in saltwater, wash the boat and all equipment with soap and water. Flush the engines using fresh water. Refer to the engine owner's manual for instructions on flushing your outboard engines.
- Check the bilge area for debris and excess water.
- Fill the fuel tank to near full to reduce condensation. Allow enough room in the tank for the fuel to expand without being forced out through the vent.

• Turn off all electrical equipment except the automatic bilge pumps.

**Everglades**<sup>®</sup>

 $\overline{}$ 

- If you are going to leave the boat unattended, put the battery main switches in the "Off" position and close all seacocks.
- Make sure the boat is securely moored.

Λ

### CAUTION

TO PREVENT DAMAGE TO THE BOAT, CLOSE ALL SEACOCKS BEFORE LEAVING THE BOAT.

## 2.5 Docking, Anchoring and Mooring Docking and Dock Lines

Maneuvering the boat near the dock and securing the boat require skill and techniques that are unique to the water and wind conditions and the layout of the dock. If possible, position a crew member at the bow and stern to man the lines and assist in docking operations. While maneuvering close to the dock consideration must be given to the wind and current. You should anticipate the effect these forces will have on the boat and use them to help put the boat where you want it. It is important to practice in open water using an imaginary dock enough to develop a sense for the way your boat handles in a variety of docking scenarios. You must be able to foresee the possibilities and have solutions in mind before problems occur.

Approaching a dock or backing into a slip in high winds or strong currents requires a considerable amount of skill. If you are new to boat handling, you should take lessons from an experienced pilot to learn how to maneuver your boat in tight quarters in less than ideal conditions. You should also practice away from the dock during windy conditions.

Dock lines are generally twisted or braided nylon. Nylon is strong and stretches to absorb shock. It also has a long life and is soft and easy on the hands. The line's size will vary with the size of the boat. Typically a 30 to 40 foot boat will use 5/8inch line and a 20 to 30 foot boat will use 1/2-inch line. The number of lines and their configuration will vary depending on the dock, the range of the tide and many other factors. Usually a combination of bow, stern and spring lines is used to secure the boat.

\_ by Dougherty

#### Maneuvering to the Dock

Approach the dock slowly at a 30 to 40 degree angle. Whenever possible, approach against the wind or current. Turn the engines straight & shift to neutral when you feel you have enough momentum to reach the dock. Use reverse on the outboard engine while turning the steering wheel towards the dock to slow the boat and pull the stern toward the dock as the boat approaches. Straighten the engines and use both engines to stop the boat if it is still moving forward against the pilings. If you executed your approach properly, the boat will lightly touch the pilings at the same time the forward momentum is stopped. Have the dock lines ready and secure the boat as soon at it stops. Use fenders to protect the boat while it is docked. Keep the engines running until the lines are secured.

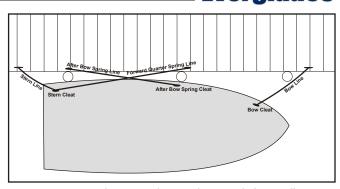
#### **Backing into a Slip**

Approach the slip with the stern against the wind or current and the engines straight ahead. Use the engines and turn the steering wheel to maneuver the boat into alignment with the slip. Reverse the engines and slowly back into the slip. Shift from reverse to neutral frequently to prevent the boat from gaining too much speed. Move the stern right and left by shifting the engines in and out of gear or turning the wheel. When nearly in the slip all the way, straighten the engines and shift to forward to stop. Keep the engines running until the lines are secured.

#### Securing Dock Lines

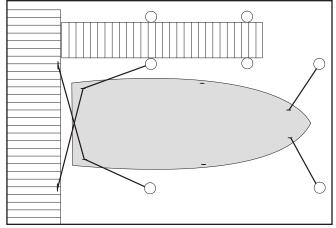
Securing a boat that is tied along side the dock typically requires a bow and stern line and two spring lines. The bow and stern lines are usually secured to the dock at a 40° angle aft of the stern cleat and forward of the bow cleat. The after bow spring line is secured to the dock at a 40° angle aft of the after bow spring cleat. The forward quarter spring is secured to the dock at a 40° angle forward of the stern cleat. The spring lines keep the boat square to the dock and reduce fore and aft movement while allowing the boat to move up and down with the tide.

Securing a boat in a slip is somewhat different. It typically requires two bow lines secured to pilings on each side of the bow, two stern lines secured to the dock and two spring lines that prevent the boat from hitting the dock. The bow lines are typically secured with enough slack to allow the boat to ride the tide. The stern lines are crossed. One line runs from the port aft boat cleat to the starboard dock cleat and the other line runs from



**Everglades**"

Securing The Boat Along Side A Dock (Typical)



Securing The Boat In A Slip (Typical)

the starboard aft boat cleat to the port cleat on the dock. The stern lines center the boat, control the forward motion and allow the boat to ride the tide. Two forward quarter spring lines typically are secured to the stern cleats and to mid ship pilings or cleats. The spring lines keep the boat from backing into the dock while allowing it to ride the tide.

#### Leaving the Dock

Always start the engines and let them warm up for several minutes before releasing the lines. Boats steer from the stern and it is important that you achieve enough clearance at the stern to maneuver the boat as quickly as possible. Push the stern off and maneuver such that you get stern clearance quickly. Proceed slowly until well clear of the dock and other boats.

#### Mooring

Approach the mooring heading into the wind or current. Shift to neutral when you have just enough headway to reach the buoy. Position a crew member on the bow to retrieve the mooring line with a boat hook and secure the line. Keep the engines running until the line is secured.

by Dougherty

## **Everglades**<sup>®</sup>

#### Leaving a Mooring

Start the engines and let them warm up for several minutes before releasing the mooring line. The boat will already be headed into the wind, so move it forward enough to loosen the line and untie it. Back the boat away from the mooring until you can see the buoy. Move the boat slowly away from the mooring.

#### Anchoring

Make sure the bitter end of the anchor line is attached to boat before dropping the anchor. Bring the bow into the wind or current and put the engine in neutral. When the vessel comes to a stop, lower the anchor over the bow. Pay out anchor line so that it is at least 5 to 7 times the depth of the water and secure the line to a cleat. Use caution to avoid getting your feet or hands tangled in the line. Additional scope of 10 times the depth may be required for storm conditions. Check landmarks on shore or your GPS position to make sure the anchor is not dragging. If it is dragging, you will have to start all over. It is prudent to use two anchors at the bow if your are anchoring overnight or in rough weather.

After the anchor is set, the windlass must not be left to take the entire force from the anchor line. Boats lying to their anchor in a high swell or heavy weather conditions will snub on the line. This can cause slippage or apply excessive loads to the windlass. The line should always be made fast to a bow cleat to relieve the load on the windlass.

Do not set a bow and stern anchor when mooring, only anchor from the bow. The stern anchor will not allow the boat to swing with the current and wind. If your are anchored in a mooring with other boats, your boat will not swing with the other boats in the mooring, creating a potential for contact with another boat when the tide or wind changes. Additionally, having the stern to the wind or tide creates a potentially hazardous situation for the boat and crew.

#### **Releasing the Anchor**

Release the anchor by driving the boat slowly to the point where the anchor line becomes vertical. It should release when you pass that point. If the anchor doesn't release right away, stop the boat directly above the anchor and tie the line to the cleat as tight as possible. The up and down movement of the boat will usually loosen the anchor within a minute. Make sure you secure the anchor and properly stow the line before operating the boat.

#### WARNING

NEVER ANCHOR THE BOAT BY THE STERN. THE STERN OF THE BOAT IS VULNERABLE TO SWAMPING FROM WAVE ACTION AND WIND AND CURRENT WILL PUT MORE STRESS ON THE ANCHOR WHEN IT IS ATTACHED TO THE STERN. ONLY ANCHOR THE BOAT BY THE BOW

#### 2.6 Controls, Steering or Propulsion System Failure

If the propulsion, control or steering system fails while you are operating the boat, bring the throttles to idle and shift to neutral. Decide whether you need to put out the anchor to prevent the boat from drifting or to hold the bow into the seas. Investigate and correct the problem if you can. Turn the engine off before opening the engine cowling to make repairs. If you are unable to correct the problem, call for help.

If only one engine has failed, you can usually run home on the other engine. Be careful not to apply too much power to the engine that is running. When only one engine is used to power a twin engine boat, that engine is over propped and can be overloaded if too much throttle is applied. You should contact your dealer or the engine manufacturer for the maximum power settings when running without one engine.

#### 2.7 Collision

If your boat is involved in a collision with another boat, dock, piling or a sandbar, your first priority is to check your passengers for injuries and administer first aid if necessary. Once your passengers situations are stabilized, thoroughly inspect the boat for damage. Check below decks for leaks and the control systems for proper operation. Plug all leaks or make the necessary repairs to the control systems before proceeding slowly and carefully to port. Request assistance if necessary. Haul the boat and make a thorough inspection of the hull and running gear for damage.

#### 2.8 Grounding, Towing and Rendering Assistance

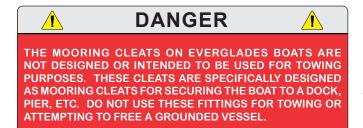
The law requires the owner or operator of a vessel to render assistance to any individual or vessel in distress, as long as his vessel is not endangered in the process.

\_ by Dougherty

## **Everglades**<sup>®</sup>

If the boat should become disabled or if another craft that is disabled requires assistance, great care must be taken. The stress applied to a boat during towing may become excessive. Excessive stress can damage the structure of the boat and create a safety hazard for those aboard.

Freeing a grounded vessel or towing a boat that is disabled, requires specialized equipment and knowledge. Line failure and structural damage caused by improper towing have resulted in fatal injuries. Because of this, we strongly suggest that these activities be left to those who have the equipment and knowledge, e.g., the U.S. Coast Guard or a commercial towing company, to safely accomplish the towing task.





WHEN TOWING OPERATIONS ARE UNDERWAY, HAVE EVERYONE ABOARD BOTH VESSELS STAY CLEAR OF THE TOW LINE AND SURROUNDING AREA. A TOW LINE THAT SHOULD BREAK WHILE UNDER STRESS CAN BE VERY DANGEROUS AND COULD CAUSE SERIOUS INJURY OR DEATH.

🔥 WARNING 🔥

RUNNING AGROUND CAN CAUSE SERIOUS INJURY TO PASSENGERS AND DAMAGE TO A BOAT AND ITS UNDERWATER GEAR. IF YOUR BOAT SHOULD BECOME GROUNDED, DISTRIBUTE PERSONAL FLOTATION DEVICES AND INSPECT THE BOAT FOR POSSIBLE DAMAGE. THOROUGHLY INSPECT THE BILGE AREA FOR SIGNS OF LEAKAGE. AN EXPERIENCED SERVICE FACILITY SHOULD CHECK YOUR UNDERWATER GEAR AT THE FIRST OPPORTUNITY. DO NOT CONTINUE TO USE YOUR BOAT IF THE CONDITION OF THE UNDERWATER EQUIPMENT IS QUESTIONABLE.

#### 2.9 Flooding or Capsizing

Boats can become unstable if they become flooded or completely swamped. You must always be aware of the position of the boat to the seas and the amount of water in the bilge. Water entering the boat through the transom door or over the stern gunnels can usually be corrected by closing the door and turning the boat into the waves. If the bilge is flooding because of a hole in the hull or a defective hose, you may be able to plug it with rags, close the thru-hull valve or assist the pumps by bailing with buckets. Put a mayday call in to the Coast Guard or nearby boats and distribute life jackets as soon as you discover your boat is in trouble.

If the boat becomes swamped and capsizes, you and your passengers should stay with the boat as long as you can. It is much easier for the Coast Guard, aircraft or other boats to spot, than people in the water. If your boat is equipped with an EPIRB, make sure it is activated. When activated, EPIRBs will send distress code homing beacons that allow Coast Guard aircraft to identify your boat and find you quickly.

#### 2.10 Fishing

Fishing can be very exciting and distracting for the operator when the action gets intense. You must always be conscious of the fact that your primary responsibility is the safe operation of your boat and the safety of your passengers and other boats in the area.

You must always make sure the helm is properly manned and is never left unattended while trolling. If your boat is equipped with a tower, caution and good common sense must be exercised whenever someone is in the tower. Remember, weight in the tower raises the boat's center of gravity and the boat's motion is greatly exaggerated for the person in a tower.

If you are fishing in an area that is crowded with other fishing boats, it may be difficult to follow the rules of the road. This situation can become especially difficult when most boats are trolling. Being courteous and exercising good common sense is essential. Avoid trying to assert your right-of-way and concentrate on staying clear and preventing tangled or cut lines and other unpleasant encounters with other boats. Also keep in mind that fishing line wrapped around a propeller shaft can damage seals in the engine lower unit.



#### 2.11 Crow's Nest (Optional)

Your boat could be equipped with an optional Crow's Nest (observation tower). The Crow's Nest is a powder coated, welded aluminum frame that is bolted to the hardtop and design for one person. It is intended to be an observation station only, there are no controls.

## The following is a list of safety precautions for the Crow's Nest:

• Do not allow anyone in the Crow's Nest during rough sea conditions. The boat's motions are exaggerated in the Crow's Nest and this motion may become excessive in rough seas.



OPERATING THE BOAT AT HIGH SPEEDS WITH SOMEONE IN THE CROW'S NEST CAN CAUSE SEVERE INJURY OR DEATH. DO NOT OPERATE THE BOAT AT PLANNING SPEEDS WITH SOMEONE IN THE CROW'S NEST. THE BOATS MOTIONS ARE EXAGGERATED IN THE CROW'S NEST AND MAY BECOME EXCESSIVE FOR SOMEONE IN THE CROW'S NEST, EVEN THOUGH THE MOTION FEELS NORMAL AT THE HELM. ONLY OPERATE THE BOAT AT SLOW SPEEDS WHILE SOMEONE IS IN THE CROW'S NEST.

- Do not overload the Crow's Nest. It is designed to hold the weight of only one average-sized person. Weight in the Crow's Nest raises the boat's center of gravity. Too much weight could make the boat unstable. This is particularly important in small boats.
- Always pay close attention to your grip and footing on the Crow's Nest ladder. Your ability to achieve a good grip and proper footing is reduced in wet or rough weather. Therefore, the Crow's Nest should be avoided in these conditions.
- Only operate the boat with someone in the Crow's Nest in familiar waters or where running aground is not a possibility. Running aground while someone is riding in the Crow's Nest could result in severe injury.
- Always be alert for waves and boat wakes when someone is in the Crow's Nest. Remember that the boat's motions are exaggerated in the Crow's Nest.

- Good common sense and judgment must be exercised at all times while someone is riding in the Crow's Nest.
- Always put the boat in NEUTRAL while someone is moving to and from the Crow's Nest and cockpit.



MUST BE EXERCISED WHEN OPERATING A BOAT WITH SOMEONE IN THE CROW'S NEST. DO NOT ALLOW ANYONE IN THE CROW'S NEST WHEN THE WATER IS ROUGH OR WHEN OPERATING IN UNFAMILIAR WATERS WHERE RUNNING AGROUND IS A POSSIBILITY. REMEMBER, WEIGHT IN THE CROW'S NEST RAISES THE BOAT'S CENTER OF GRAVITY AND THE BOAT'S MOTION IS GREATLY EXAGGERATED FOR SOMEONE RIDING IN THE CROW'S NEST.

#### 2.12 Man Overboard

If someone falls overboard, you must be prepared to react quickly, particularly when you are offshore. The following procedures will help you in recovering a person that has fallen overboard.

- Immediately stop the boat and sound a man overboard alarm and have all passengers point to the person in the water.
- Circle around quickly and throw a cushion or life jacket to the person, if possible and another to use as a marker.
- Keep the person on the driver side of the boat so you can keep him in sight at all times.
- Make sure to approach the person from the downwind side and maneuver the boat so the propellers are well clear of the person in the water.
- Turn off the engines when the person is alongside and use a ring buoy with a line attached, a paddle or boat hook to assist him to the boat. Make sure you don't hit him with the ring buoy or the boat.
- Pull the person to the boat and assist him on board.



**Everglades**<sup>®</sup>

• Check the person for injuries and administer first aid if necessary. If the injuries are serious, call for help. Refer to the Safety chapter for more information on first aid and requesting emergency medical assistance.

MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS OR OTHER SEVERE INJURY. DO NOT USE THE SWIM PLATFORM OR SWIM LADDER WHILE THE ENGINES ARE RUNNING. STOP THE ENGINES IF DIVERS OR SWIMMERS ARE ATTEMPTING TO BOARD. ALWAYS PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINES.

#### 2.13 Water Skiing and Wakeboarding

Your boat could be equipped for water skiing and wakeboarding. If you have never driven skiers before, you should spend some hours as an observer and learning from an experienced driver. If you are an experienced driver, you should take some time to become familiar with the boat and the way it handles before pulling a skier. The driver should also know the skier's ability and drive accordingly.

## The following safety precautions should be observed while towing water skiers.

- Water ski only in safe areas, away from other boats and swimmers, out of channels and in water free of underwater obstructions. The area should be at least 5 feet deep, 3000 feet long and have at least 100' between each side of the boat and any obstructions.
- Make sure that anyone who skis can swim. Do not allow people who cannot swim to water ski.
- Be sure that the skier is wearing a proper life jacket. A water skier is considered on board the boat and a Coast Guard approved life jacket is required. It is advisable and recommended for a skier to wear a flotation device designed to withstand the impact of hitting the water at high speed.
- Make sure to inspect the ski equipment and tow rope before each ski session. Never use equipment that is damaged or with loose screws, torn boots, severe corrosion or tears in the fabric. You should also inspect the ski tow rope and replace if it is frayed, has unnecessary knots or is damaged. Never use a ski tow line that is questionable.

- Secure the ski tow rope to an appropriate device intended for ski tow ropes.
- Always carry a second person on board to observe the skier or wakeboarder so that your full attention can be given to the safe operation of the boat. The operator should pay attention to driving the boat and have the observer keep him updated on the skier. Never ski after dark. It is hazardous and illegal. Neither the boat operator or skier can see well enough to navigate at skiing or wakeboarding speeds safely at night.
- Never spray swimmers, boats, rafts or other skiers. The risk for a collision makes this dangerous for the skier and people being sprayed.
- Never follow directly behind another boat while pulling skiers. Always stay a safe distance behind or off the side of other boat traffic. If the boat you are following stops unexpectedly, you may not be able to respond quick enough endangering your skier and occupants of both boats.
- Never follow behind another boat pulling a skier for any reason, even if you are not pulling a skier. If the skier you are following falls, you may not be able to respond quick enough and could run over the skier.
- When pulling multiple skiers, make sure the ropes are the same length. Never pull multiple skiers with tow ropes of different lengths.
- Always make sure to slowly pull the slack out of the ski rope and wait for the OK from the skier before advancing the throttle to ensure the rope is not wrapped around the skier and that the skier is ready. Never advance the throttle until the skier provides the ready signal.
- When turning around to pick up a fallen skier, make sure to look for other boat traffic in the direction of the turn before you turn the boat.
- Approach a skier in the water from the downwind side and be certain to stop the motion of the boat and your motor before coming in close proximity to the skier.
- Give immediate attention to a fallen skier. A fallen skier is very hard to see by other boats and is extremely vulnerable. When a skier falls, be prepared to immediately turn the boat and return to the skier.

by Dougherty .

## **Everglades**<sup>®</sup>

- Never leave a fallen skier alone in the water for any reason and have an observer display a skier down flag to alert other boaters that your skier has fallen.
- Agree on hand signals to be used between the observer and skier to communicate. This is important to eliminate confusion and ensure the safety of your skiers, wakeboarders or tubers. Refer the Hand Signals drawing in this section for signals that are commonly used during water sports activities.
- Make sure the observer watches for the skier's signal to indicate he or she is OK. If the signal is not seen immediately, assume the skier is injured and in need of immediate assistance. Be prepared to respond quickly.
- For additional information on water skiing, including hand signals and water skiing manuals, contact the American Water Skiing Association in Winter Haven, Florida, 813-324-4341.

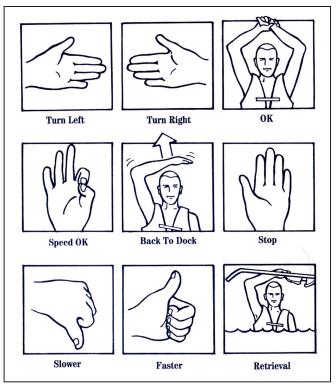


MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS OR OTHER SEVERE INJURY. DO NOT USE THE SWIM PLATFORM OR SWIM LADDER WHILE THE ENGINE IS RUNNING. STOP THE ENGINE IF DIVERS, SWIMMERS OR SKIERS ARE ATTEMPTING TO BOARD. ALWAYS PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINE.

#### 2.14 Teak Surfing

Teak Surfing is a new and dangerous boating fad that involves an individual holding on to the swim platform of a vessel while a wake builds up then lets go to body surf the wave created by the boat; hence the term "Teak Surfing." This activity puts that individual directly in the path of the boat's exhaust and poisonous carbon monoxide. Because of the multiple dangers associated with teak surfing and the carbon monoxide problem in particular, the Coast Guard has issued a safety alert that strongly advises the public not to engage in teak surfing and warns that teak surfing may cause carbon monoxide poisoning and even fatalities.

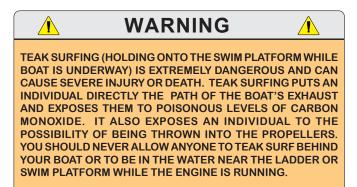
Teak surfing not only exposes an individual to potentially fatal concentrations of carbon mon-



Common Hand Signals for Water Sports Activities

oxide from the engine exhaust, it exposes them unnecessarily and dangerously to the boat's propeller. The danger is compounded by the fact that individuals do not usually wear a life jacket when teak surfing.

Teak surfing is an extremely dangerous activity and you should never allow anyone to "Teak Surf" behind your boat or be in the water near the ladder or swim platform while the engine is operating.





## **Everglades**<sup>®</sup>

#### 2.15 Trash Disposal

The discharge of plastic trash or trash mixed with plastic is illegal anywhere in the marine environment. U.S. Coast Guard regulations also restrict the dumping of other forms of garbage. Regional, state and local restrictions on garbage discharges also may apply.

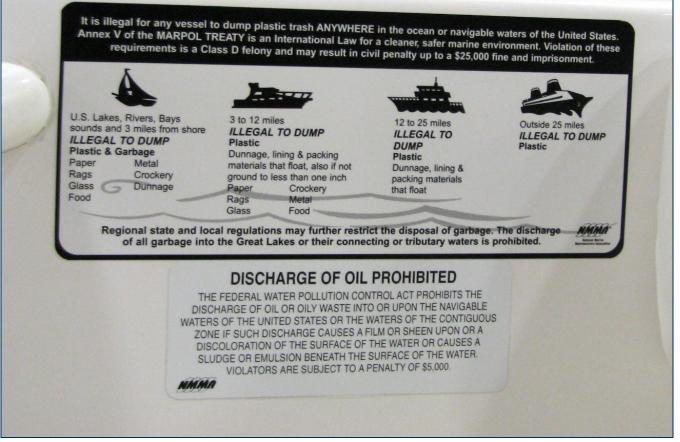
Responsible boaters store refuse in bags and dispose of it properly on shore. You should make sure your passengers are aware of the local waste laws and the trash management procedure on your boat. Refer to the placard mounted on your boat for more specific information regarding solid waste disposal.

Federal law requires that vessels of 26 feet or longer must display in a prominent location, a durable placard at least 4 by 9 inches notifying the crew and passengers of the discharge restrictions (Marpol Treaty). A label for this purpose has been shipped with the boat and is attached to the starboard side of the cockpit. It is the boat owner's responsibility to make sure this placard remains mounted and legible in accordance with the law.

#### 2.16 Trailering Your Boat

If you trailer your boat, make sure that your tow vehicle is capable of towing the weight of the trailer, boat and equipment and the weight of the passengers and equipment inside the vehicle. This may require that the tow vehicle be specially equipped with a larger engine, transmission, brakes and trailer tow package. Additionally, the laws in your state may require special permits to tow a boat this large on some or all highways.

The boat trailer is an important part of your boating package. The trailer should be matched to your boat's weight and hull. Using a trailer with a capacity too low will be unsafe on the road and cause abnormal wear. A trailer with a capacity too high, can damage the boat. Contact your trailer dealer to evaluate your towing vehicle and hitch and to make sure you have the correct trailer for your boat.



Trash Disposal and Discharge of Placards on Starboard Side of Cockpit

by Dougherty

#### Important:

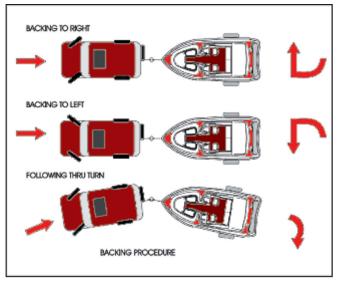
Your Everglades is a heavy boat and care must be taken when selecting the trailer. We recommend that you use a bunk style trailer that incorporates a combination of heavy duty rollers or bunks, to support the keel and long bunks running under and parallel to the stringers to support the hull. Avoid using a full roller trailer that does not have Roller trailers have a tendency to bunks. put extreme pressure points on the hull, especially on the lifting strakes and have damaged boats. The situation is worse during launching and haul out. Damage resulting from improper trailer support or the use of a full roller trailer will not be covered by the **Everglades Warranty.** 

#### Notice:

Contact your trailer dealer to evaluate your towing vehicle and hitch and to make sure you have the correct trailer for your boat.

- Make sure the trailer is a match for your boat's weight and hull design. More damage can be done to a boat by the stresses of road travel than by normal water operation. A boat hull is designed to be supported evenly by water. So, when it is transported on a trailer it should be supported structurally as evenly across the hull as possible allowing for even distribution of the weight of the hull, engines and equipment.
- Make sure the trailer bunks and/or rollers properly support the hull and do not put pressure on the lifting strakes. The rollers and bunks must be kept in good condition to prevent scratching and gouging of the hull.
- The capacity rating of the trailer should be greater than the combined weight of the boat, motor and equipment. The gross vehicle weight rating must be shown on the trailer. Make sure the weight of the boat, engine, gear and trailer is not more than the gross vehicle weight rating.
- Make sure the boat is securely fastened on the trailer to prevent movement between the boat and trailer. The bow eye on the boat should be secured with a rope, chain or turnbuckle in addition to the winch cable. Additional straps may be required across the beam of the boat or from the transom eyes to the trailer.

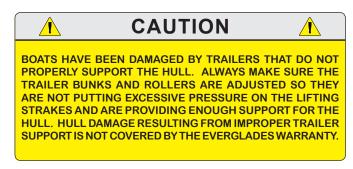
## **\_ Everglades**<sup>®</sup>



Backing Procedure for Boat Trailers

#### Notice:

Your trailer dealer will give instructions on how to load, fasten and launch your boat.



#### **Before Going Out On The Highway:**

- Side curtains, clear connector, backdrop and aft curtain must be removed when trailering. Canvas enclosures are not designed to withstand the extreme wind pressure encountered while trailering and will be damaged. Always remove and properly store the enclosure before trailering your boat.
- Make sure the tow BALL and TRAILER COUPLER are the same size and bolts and nuts are tightly secured.



# Operation

- The COUPLER MUST BE COMPLETELY OVER THE BALL and the LATCHING MECHANISM LOCKED DOWN.
- Make sure the TRAILER IS LOADED EVENLY from front to rear as well as side to side and has the correct weight on the hitch. Too much weight on the hitch will cause the rear of the tow vehicle to drag and may make steering more difficult. Too little weight on the hitch will cause the rig to fishtail and will make controlling the tow vehicle difficult. Contact your trailer manufacturer or dealer for the correct weight on the hitch for your trailer.
- The SAFETY CHAINS must be attached crisscrossing under the coupler to the frame of the tow vehicle. If the ball was to break, the trailer would follow in a straight line and prevent the coupler from dragging on the road. Make sure the trailer emergency brake cable or chain is also installed to the tow vehicle frame.

• Make sure the LIGHTS on the trailer function properly.

**Everglades**<sup>®</sup>

- CHECK THE BRAKES. On a level parking area roll forward and apply the brakes several times at increasing speeds to determine if the brakes on the tow vehicle and trailer are working properly.
- Make sure the tow vehicle has SIDE VIEW MIRRORS that are large enough to provide an unobstructed rear view on both sides of the vehicle.
- CHECK THE TIRES and WHEEL BEARINGS.

## Notice:

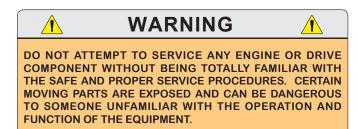
Make sure your towing vehicle and trailer are in compliance with all state and local laws. Contact your state motor vehicle bureau for laws governing the towing of trailers. THIS PAGE WAS LEFT BLANK INTENTIONALLY

# **PROPULSION SYSTEM**

# 3.1 General

Your Everglades is designed to be powered with 4-cycle outboard motors. 4-cycle outboard engines do not use an oil injection system and are not equipped with remote oil tanks. They have an oil sump in the crankcase that must be kept full of the type of oil recommended by the engine manufacturer. The oil must be checked before each use and changed regularly.

Each manufacturer of the various outboard motors provides an owner's information manual with its product. It is important that you read the manual(s) very carefully and become familiar with the proper care and operation of the engines and drive systems. A warranty registration card has been furnished with each new engine and can be located in the engine owner's manual. All information requested on this card should be filled out completely by the dealer and purchaser and then returned to the respective engine manufacturer as soon as possible.





DO NOT INHALE EXHAUST FUMES! EXHAUST CONTAINS CARBON MONOXIDE THAT IS COLORLESS AND ODORLESS. CARBON MONOXIDE IS A DANGEROUS GAS THAT IS POTENTIALLY LETHAL.

# 3.2 Drive System Corrosion

Each outboard motor is a complete drive system with the gear case being just forward of the propeller and connected to the power head with a vertical drive shaft. All engines require some maintenance. Routine maintenance recommend-



Outboard Power System

ed for your engine is outlined in the engine owner's manual. Routine maintenance is normally the primary concern unless the boat is to be kept in saltwater for extended periods of time. Then the main concerns are marine growth and galvanic corrosion.

Marine growth occurs when components are left in the water for extended periods and can cause poor performance or permanent damage to the exposed components. The type of growth and how quickly it occurs is relative to the water conditions in your boating area. Water temperature, pollution, current, etc. can have an effect on marine growth.

Galvanic corrosion is the corrosion process occurring when different metals are submerged in an electrolyte. Seawater is an electrolyte and submerged engine components must be properly protected. Outboard motors are equipped with sacrificial anodes to prevent galvanic corrosion problems. The anodes must be monitored and replaced as necessary. For locations and maintenance, please refer to the engine owner's manual.

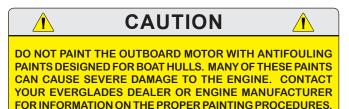
When leaving the boat in the water, tilt the motors as high as possible. This will decrease the

by Dougherty.

# **Propulsion System**



risk of marine growth around the cooling inlets, propeller and exhaust ports and damage from galvanic corrosion.



Notice:

If the boat is used in salt or badly polluted water, the engines should be flushed after each use. Refer to the engine owner's manual for the proper engine flushing procedure.



WATER IMPELLER OR ENGINE COULD RESULT.

# 3.3 Engine Lubrication

4-cycle outboard engines incorporate a pressuretype lubrication system with an oil sump in the crankcase that must be kept full of the type and grade of oil recommended by the engine manufacturer. It is normal for 4-cycle engines to consume a small amount of oil. Therefore, the oil must be checked before each use and changed at regular intervals as instructed by the engine owner's manual.

#### Notice:

Always monitor the oil level in the crankcase and only use the type of oil specified by the engine manufacturer. Yamaha engines specify Yamalube engine oil.

# 3.4 Engine Cooling System

Outboard engines are raw water (seawater) cooled. Water is pumped through the water inlets, circulated through the engine block and relinquished with the exhaust gases through the propeller hub. The water pump uses a small impeller made of synthetic rubber. The impeller and water pump cannot run dry for more than a few seconds. In most outboard motors, some cooling water is diverted through ports below the engine cowling. This allows the operator to visually check the operation of the cooling system. When the engine is started, always check for a steady stream of water coming out of those ports.

# 3.5 Propellers

The propellers convert the engine's power into thrust. They come in a variety of styles, diameters and pitches. All boats powered by Yamaha engines are equipped with Yamaha propellers. The one that will best suit the needs of your boat will depend somewhat on your application and expected average load. Propeller sizes are identified by two numbers stamped on the prop in sequence. The 1st number in the sequence (example 14" x 21") is the diameter of the propeller and the 2nd number is the pitch. Pitch is the theoretical distance traveled by the propeller in each revolution.

Always repair or replace a propeller immediately if it has been damaged. A damaged and therefore out of balance propeller can cause vibration that can be felt in the boat and could damage the engine gear assembly. Refer to the engine owner's manual for information on propeller removal and installation.



# **Propulsion System**

# **Everglades**<sup>®</sup>

# 3.6 Performance Issues and Propellers

It is extremely important that the boat is propped to run at or very near the recommended top RPM with an average load. If the top RPM is above or below the recommend range, the propellers must be changed to prevent loss of performance and possible engine damage.

Your boat is equipped from the factory with counter rotating engines that are mounted to achieve quicker planing and optimum performance. Therefore, the left rotation engine is mounted on the port side of the transom and the right rotation engine is mounted on the starboard side. You should make sure that each propeller matches the rotation of the engine.

#### Notice:

Before changing propellers to correct boat performance problems, be sure other factors such as engine tuning, bottom and running gear growth, etc. are not the source of performance changes. Always be sure the load conditions are those normally experienced, before changing propellers.

Your boat was shipped with propellers that typically provide optimum performance for your boat. However there are factors that can affect performance and propeller requirements.

#### Some are as follows:

- You should be sure the load conditions are those normally experienced. If the boat ran in the required RPM range when it was new and you have not added any additional gear or heavy equipment and have not damaged the propellers, there is a good chance the propellers are not the problem.
- The addition of heavy equipment like a tower, life rafts, additional coolers, etc., will cause additional load on the engines. Consequently, different propellers may be required.



Yamaha Propeller

 Boats operated at high altitudes (above 2000 feet). Engines operated at high altitudes will not be able to develop as much horsepower as they do at or near sea level. Consequently, different propellers may be required.

#### Notice:

Outboard engines can be damaged and the warranty void if the boat is not propped correctly. Always consult your Everglades dealer or authorized engine service dealer when making changes to the propellers or if the boat does not run near the top recommended RPM.

by Dougherty .



Yamaha Command Link Plus® Display

# 3.7 Engine Instrumentation

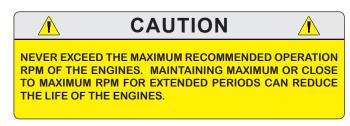
The helm station is equipped with a set of engine instruments and/or alarms. These instruments allow the operator to monitor the operational condition of the engines. Close observation of these instruments allows the operator to operate the engines at the most efficient level and could save them from serious costly damage.

Most Everglades boats are equipped with Yamaha engines and Command Link® Plus LCD multifunction display. This system can be integrated with the optional electronic navigation equipment installed on your boat. A brief description of the Command Link Plus® system integrated gauges and their basic functions are listed in this section. Other functions that are dependent on the electronics installed on your boat may be available. Please refer to the Yamaha engine and Command Link® Plus owner's manuals and the manuals for the electronics installed on your boat for detailed information on the operation of the instruments and additional functions available. The instrumentation is unique to the type of outboard motors installed on your Everglades. **Some or all of the following gauges may be present.** 

#### **Tachometers**

The tachometers display the speed of the engines in revolutions per minute (RPM). This speed is not the boat speed or necessarily the speed of the propeller.

The tachometer display also contains the engine trim meters, oil pressure indicator, water pressure, water temperature, volt meters and the overheat warning indicator.





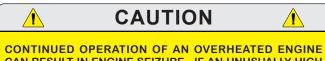
# **Propulsion System**

## Speedometer

Yamaha Command Link Plus<sup>®</sup> speedometers can indicate boat speed via the engine pickup or an optional GPS or depth sounder triducer, if these options are installed in your boat. Refer to the engine gauge and electronics operating manuals for more information on the speedometer options available for your boat.

## **Overheat Warning Indicator**

The temperature warning indicates that the temperature of the engine is too high. A sudden increase in the temperature could indicate an obstructed water inlet or an impeller failure. On Yamaha engines the overheat warning indicator is built into the LCD display. It will start to blink and sound an alarm if the engine temperature is too high.



CAN RESULT IN ENGINE SEIZURE. IF AN UNUSUALLY HIGH TEMPERATURE READING OCCURS, SHUT THE ENGINE OFF IMMEDIATELY. THEN INVESTIGATE AND CORRECT THE PROBLEM

## **Fuel Gauge**

The fuel gauge indicates the amount of fuel in the fuel tanks. On boats equipped with Yamaha Command Link Plus<sup>®</sup>, the fuel gauge is built into the LCD Display. The fuel indicator on the display will begin to blink if the fuel in the tank drops too low. The system can monitor up to 4 fuel or water tanks.

### Voltmeters

The voltmeters display the voltage for the battery and the charging system for each engine. The normal voltage is 11 to 12 volts with the engines off and 13 to 14.5 volts with the engines running. The Yamaha engine voltmeter is built into the LCD display. It will begin to blink if the voltage in the battery drops too low.

#### **Hour Meters**

The hour meters keep a record of the operating time for each engine.

## **Engine Tilt/Trim Gauges**

The tilt/trim gauges monitor the position of each outboard engine. The upper range of the gauge



# **Everglades**



Typical Command Link Plus<sup>®</sup> Engine and Tachometer Display

indicates the tilt, which is used for trailering and shallow water operation. The lower range indicates the trim position. This is the range used to adjust the hull angle while operating your boat on plane. The Yamaha engine trim indicator is built into the LCD display. Please refer to the engine and Command Link Plus<sup>®</sup> owner's manuals for more information on the operation of the outboard power tilt and trim.

#### **Engine Alarms**

All outboards are equipped with an audible alarm system mounted in the helm area that monitors selected critical engine systems. The alarm will sound if one of these systems begins to fail. Refer to the engine owner's manual for information on the alarms installed with your engines.



## **Fuel Management**

Fuel management systems are standard equipment with some outboard engines. On Yamaha engines, the fuel management gauge is built into the Command Link Plus<sup>®</sup> display and can monitor miles per gallon, total gallons used and total gallons remaining.

If you have a fuel management system installed on your boat, please refer to the engine or fuel management manual for detailed information on that system.

# **Propulsion System**

# **Everglades**<sup>®</sup>

# Depth Gauge (Optional)

The depth gauge indicates the depth of the water below the bottom of the boat.

# Compass

All boats are equipped with a compass on the top of the instrument panel. The compass cannot be adjusted accurately at the factory as it must be compensated for the influence of the electrical equipment and electronics unique to your boat. Therefore, the compass should be adjusted by a professional after the electronics and additional electrical accessories are installed and before operating the boat. To adjust the compass for your area, read the instructions on "Compass Compensation" given to you in the literature packet.

## **Instrument Maintenance**

Electrical protection for instruments and ignition circuitry is provided by a set of fuses or circuit breakers located on each engine. The ignition switches should be sprayed periodically with a contact cleaner/lubricant. The ignition switches and all instruments, controls, etc. should be protected from the weather when not in use. Excessive exposure can lead to gauge and ignition switch difficulties.



Typical Compass



# **HELM CONTROL SYSTEMS**

# 4.1 General

The helm controls consist of three systems: the engine throttle and shift controls, the steering system and the trim tab control switches. These systems provide the operator with the ability to control the direction and attitude of the boat from the helm station.

In addition to the primary helm controls, your boat could be equipped with an optional bow thruster that provides the operator additional control of the bow while docking or anchoring the boat in tight quarters or high winds and strong currents.

Each manufacturer of the control components provides an owner's manual with its product. It is important that you read the manuals and become familiar with the proper care and operation of the control systems.

# 4.2 Engine Throttle and Shift Controls

The shift and throttle controls on your boat may vary depending on the engines used. Refer to the engine or control manuals for specific information on the controls installed on your boat.

# **Electronic Engine Controls**

Electronic engine controls are standard on Yamaha engines. The following control description is typical of most electronic control installations.

The helm is designed for a binnacle style control with a single lever for each engine. The electronic control system consists of three major components: the electronic control head, display screen and keypad, the control processors and applicable harnesses. The controls are completely electronic and there are no cables.

The controls have a single lever for each engine that operates as a gearshift and a throttle. General operation will include a position for neutral (straight up and down or slightly aft of vertical), a forward position (the 1st detent forward of neutral) and a reverse position (the 1st detent aft of neutral). Advancing the control lever beyond the shift range advances the throttle in forward or reverse. Each control is equipped with a means of permitting the engine to be operated at a higher



Yamaha Electronic Controls

than idle RPM while in neutral for cold starting and warm-up purposes. The control levers are equipped with adjustable control head detent and friction settings.

The engine controls and Command Link key pad have integrated switches and indicator lights which allow the operator to control all aspects of the boat's propulsion system. LED lights on the control pad indicate that the control is activated and the engines can be started.

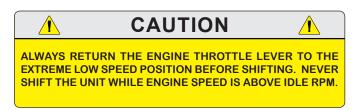
by Dougherty



# The most common features activated or monitored by the keypad are:

- Starter lockout, which prevents the engine from being started in gear.
- Gear lockout, which allows the engine RPM to be advanced in neutral safely.
- Battery voltage warning indicator that warns the operator of high or low voltage supplied to the system (audible alarm).
- An engine synchronization feature that automatically keeps both engines at the same RPM while cruising. Refer to Engine Synchronizing in this section and the control systems owner's manual for more information regarding engine synchronization.
- Trolling feature that allows the operator to increase or decrease the engine speed in 50 RPM increments while operating at trolling speeds between 600 1000 RPM.
- Station transfer that allows the operator to transfer control from one station to another with the push of a button on boats with two helm stations. Each station must be selected before the controls will operate from that station.

These features and others not mentioned require specific procedures to activate and operate them properly. Some of the procedures and features are unique to the engines and other options installed on your boat. It is essential that you read the owner's manual for the controls and be completely familiar with their operation before using your boat.



# **Engine Synchronizer**

During most operations of a twin engine boat, it is advantageous for both engines to be operated at the same RPM. This reduces noise and vibration and can increase engine efficiency. Setting the throttles so that the engines are running the same RPM (synchronized) can be done by listening to the engine sounds at low RPM and with the automatic synchronizer feature built into the electronic engine controls when the engines are operating above 1000 RPM. Attempting to synchronize the engines solely by using the tachometer readings or control lever placement generally will not work. When the engines are in proper synchronization, the throttle levers may not necessarily be even.

Please refer to the engine or control owner's manuals for more information on the engine synchronizer and other features for the electronic controls installed on your boat.

# 4.3 Neutral Safety Switch

Every control system has a neutral safety switch incorporated into it. This device prohibits the engine from being started while the shift lever is in any position other than the neutral position. If the engine will not start, slight movement of the shift lever may be necessary to locate the neutral position and disengage the safety cutout switch. Control adjustments may be required to correct this condition should it persist. See your Everglades dealer for necessary control and cable adjustments.

The neutral safety switches should be tested periodically to ensure that they are operating properly. To test the neutral safety switches, make sure the engines are tilted down and move the shift levers to the forward position.

Make sure the throttle control levers are not advanced past the idle position. Turn the ignition key to the start position just long enough to briefly engage the starter for the engine. Do not hold the key in the start position long enough to start the engine. The starter should not engage for either engine. Repeat this test with the shift levers in reverse and the engine throttles at idle. Again, the starter should not engage for either engine. If the starter for either engine engages with the shift controls in any position other than the neutral position, then the neutral safety switch is not functioning properly and you should contact your dealer to have the neutral safety switch repaired by a qualified marine mechanic before using the boat. If an engine starts in gear during this test, immediately move the control lever to the neutral position and turn the engine off.



Λ

# **Everglades**<sup>®</sup>

WARNING

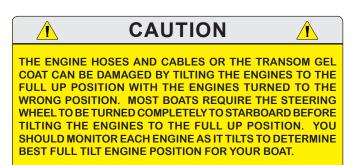
IN SOME SITUATIONS, IT MAY BE POSSIBLE TO ACCIDENTALLY START THE ENGINES IN GEAR WITH THE THROTTLES ABOVE IDLE IF THE NEUTRAL SAFETY SWITCH IS NOT OPERATING PROPERLY. THIS WOULD CAUSE THE BOAT TO ACCELERATE UNEXPECTEDLY IN FORWARD OR REVERSE AND COULD RESULT IN LOSS OF CONTROL, DAMAGE TO THE BOAT OR INJURY TO PASSENGERS. ALWAYS TEST THE NEUTRAL SAFETY SWITCH PERIODICALLY AND CORRECT ANY PROBLEMS BEFORE USING THE BOAT.

# 4.4 Engine Power Tilt and Trim

All outboard engines have a tilt and trim feature. Most outboard engines have tilt/trim switches built into the engine shift and throttle controls that allow the operator to control the position of the outboards from the helm. Typically, a switch or switches on the port control lever grip activates the tilt/trim for the engines. Yamaha dual engine controls have two switches on the cover that activate each engine tilt/trim individually. The maximum tilt angle on the Yamaha F350 engines is preset at the factory. If necessary, the maximum tilt angle can be adjusted by your Everglades or Yamaha dealer by reprogramming the settings using the Yamaha engine diagnostic system.

Moving the outboard closer to the boat transom is called trimming "in" or "down." Moving the outboard further away from the boat transom is called trimming "out" or "up." In most cases, the boat will run best with the outboard adjusted so the hull will run at a 3 to 5 degree angle to the water.

The term "trim" generally refers to the adjustment of the outboard within the first 20° range of travel. This is the range used while operating your boat on plane. The term "tilt" is generally used when referring to adjusting the outboard further up for shallow water operation or trailering. For information on the proper use and maintenance of the power tilt and trim, please refer to the engine owner's manual.





Engine Stop Switch & Lanyard Ignition Switch



SOME AUTOPILOTS HAVE ENGINE POSITION SENSORS THAT ARE MOUNTED TO THE HYDRAULIC STEERING CYLINDER. WITH THESE AUTOPILOTS, THE ENGINE POSITION SENSOR BRACKET COULD HIT THE TRANSOM WHEN THE ENGINES ARE TILTED TO THE FULL UP POSITION AND CAUSE DAMAGE TO THE ENGINE RIGGING, THE AUTOPILOT OR THE TRANSOM. IF YOU HAVE AN AUTOPILOT INSTALLED ON YOUR BOAT, YOU SHOULD MONITOR THE LOCATION OF THE ENGINE CABLES AND AUTOPILOT BRACKETS AS THE ENGINES ARE TILTED TO DETERMINE THE BEST ENGINE POSITION AND MAXIMUM ENGINE TILT FOR YOUR APPLICATION.

# 4.5 Engine Stop Switch

Your boat is equipped with an engine stop switch and lanyard. When the lanyard is pulled it will engage the switch and shut off the engines. We strongly recommend that the lanyard be attached to the driver whenever the engines are running. If an engine will not start, it could be because the lanyard is not properly inserted into the engine stop switch. Always make sure the lanyard is properly attached to the engine stop switch before attempting to start the engines.

Refer to the engine owner's manual for more information on the engine stop switch.

by Dougherty.

# **Everglades**<sup>®</sup>

# **4.6** Steering System Manual Hydraulic Steering (Standard on the 295 Pilot)

The steering system is hydraulic and made of three main components: the helm assembly, hydraulic hoses and the hydraulic cylinder. The helm unit acts as both a fluid reservoir and pump. Turning of the helm or steering wheel pumps the fluid in the hydraulic hoses and activates the hydraulic cylinders causing the motors to turn. A slight clicking sound may be heard as the wheel is turned. This sound is the opening and closing of valves in the helm unit and is normal.

# Power Assist Hydraulic Steering (Optional on the 295 Pilot & Standard on the 325 Pilot)

The power assist steering system is comprised of two hydraulic circuits: a manual system, which is the control element and a hydraulic power pump, which is the working element.

The manual system is hydraulic and operates as described in the Manual Hydraulic Steering System in this section.

The power system is an electronically controlled, 12 volt hydraulic pump that boosts the fluid pressure being sent from the helm pump to the steering cylinders to provide "Power" for the steering system which results in much easier effort at the steering wheel, even under heavy loads. In the event of a power loss or failure of the hydraulic steering pump, the steering system will automatically revert to a manual hydraulic system.

# **Steering Cylinders and Tie Bar**

Dual outboards are coupled near the tiller arms by a tie bar and controlled by two steering cylinders. There is one cylinder on the port engine and one on the starboard engine. The engines must be aligned to provide maximum stability on straight ahead runs and proper tracking through corners. Dual outboards are aligned so the engines are towed in slightly (.25" to .5") at the propellers. Engine or steering system damage may require the engines to be realigned.

# **Tilt Steering Wheel**

The steering wheel can be tilted to five different positions by activating the tilt lock lever located on the bottom of the helm station. When the lever is released, it automatically locks the steering wheel at or close to that angle. Refer to the



Typical Power Steering Tilt Steering Wheel



Tie Bar and Dual Steering Cylinders

steering manufacturer owner's manual for specific information on the steering system.

# 4.7 Trim Tabs

The trim tabs are mounted below the swim platform and integrated transom engine mounting system. A dual rocker switch is used to control the trim tabs. The switch controls bow up and down movements. It also controls starboard and port up and down movements. Bow up and bow down will control the hull planing attitude, while port and starboard up and down provides control for the hull listing.



# **Everglades**<sup>®</sup>

The trim tabs are programmed to automatically retract when the engines are shutdown to keep the actuators clean and set the tabs in the full "UP" position when leaving the dock. Refer to the trim tab operating manual for more information on the operation and programming of the trim tabs.

Before leaving the dock, make sure that the tabs are in the full "UP" position. If they are not, press and hold the control in the bow up position for ten (10) seconds to fully retract the tabs.

Always establish the intended heading and cruise speed before attempting to adjust the hull attitude with the trim tabs. After stabilizing speed and direction, move the trim tabs to achieve a level side to side running attitude being careful not to over trim.

After depressing a trim tab switch, always wait a few seconds for the change in the trim plane to take effect. Avoid depressing the switch while awaiting the trim plane reaction. By the time the effect is noticeable the trim tab plane will have moved too far and thus the boat will be in an overcompensated position.

When running at a speed that will result in the boat falling off plane, lowering the tabs slightly, bow down, will improve the running angle and operating efficiency. Too much bow down tabs can reduce operating efficiency and cause substantial steering and handling difficulties.

Be extremely careful when operating in a following sea. The effect of trim tabs is amplified under such conditions. Steering and handling difficulties can result from improper trim tab usage, particularly in a following sea. Always raise the tabs to the full bow up position in these conditions.

When running at high speeds be sure that the tabs are in the full "UP" position. Only enough trim plane action should be used to compensate for any listing. Trim tabs are extremely sensitive at high speeds. Adjust for this and be prepared to slow down if difficulties arise.

When running into a chop, a slight bow down attitude will improve the ride. Be careful not to over trim. Handling difficulties may result.



Typical Trim Tab Switches



Trim Tab Plane

# 4.8 Bow Thruster (Optional)

The optional bow thruster provides the operator additional control of the bow while docking or anchoring the boat in tight quarters or high winds and strong currents. The control joystick/touch pad is located in the helm and controls the bow thruster that is mounted to the hull in the bilge below the bow seat.

The momentary touch pad buttons and joystick are activated by the pressing and holding the power button in the touch pad for 1 second. Press the button or move the joystick for the direction you wish to thrust. Press the opposite button or move joystick to change direction. A 1 second delay protects the thruster when the direction is changed. The arrow on each button indicates the direction the bow will move when it is pressed.

by Dougherty

# **Everglades**<sup>®</sup>

The bow thruster will stop when the button or joystick is released.

Press and hold the power button for 1 second to deactivate the bow thruster control pad. The bow thruster will power down automatically if it is operated constantly for 3 minutes or senses no operation for 15 minutes.

The bow thruster circuit is protected by a fuse and emergency shut off button/battery switch located in the forward bilge compartment. It is activated automatically when the thruster control panel is switched on and turns off when the panel is deactivated. It can also be activated manually with the red knob on the switch.

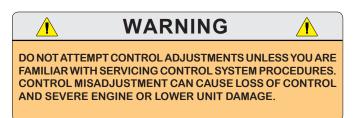
Refer to the bow thruster owner's manual for details on operating the bow thruster and using the control pad.

# 4.9 Control Systems Maintenance Control Maintenance

Periodic inspection of the control systems and all connections should be made. Signs of rust, corrosion, wear or other deterioration should immediately be serviced. Generally, periodic lubrication of all moving parts and connections with a light waterproof grease is in order.

Lubrication should be performed as often as necessary to keep the system operating smoothly.

Control system adjustments may become necessary. If adjustments become necessary, see your Everglades dealer.



# Hydraulic Steering System Maintenance

A periodic inspection of all steering hoses, linkage and helm assemblies should be made. Signs of corrosion, cracking, loosening of fastenings, excessive wear or deterioration should be corrected immediately. The fluid level for the hydraulic



Power Steering Unit in Systems Compartment

steering should be checked frequently and maintained at the proper level.

## Manual Steering Fluid Level

The steering fluid level at the vent/fill plug, located on the helm above the steering wheel, should be maintained at no less than 1/2'' below the bottom of the filler cap threads.

## **Power Steering Fluid Level**

The steering fluid level at the fill plug on the power steering pump should be maintained at no less than 1/2'' below the bottom of the filler fill hole.

Generally, periodic lubrication of all moving parts and connections with a light waterproof grease is in order. Check the hydraulic hoses and fittings for chaffing, rub marks and leaks. Replace if necessary. Failure to do so could lead to steering system failure that would result in loss of control.

When new or after repairs, hydraulic steering systems may need to have all air purged from the system. Only use hydraulic steering fluid recommended by the steering system manufacturer. Difficult steering and premature seal failure can result if the wrong fluid is used in the steering system. Review the information provided by the steering system manufacturer for proper specifications and details on system service and maintenance.



## **Trim Tab Maintenance**

The trim tab actuators are electric and require no routine maintenance except to periodically inspect the tab actuators for corrosion or marine growth and test the system to ensure that it is operating properly.

Marine growth can interfere with the proper operation of the trim tab planes and actuators. To reduce problems due to marine growth, always return the trim tabs to the full "UP" position after operating the boat and periodically inspect and clean marine growth from the actuators and planes.

If the boat is kept in the water, the trim tabs must be equipped with a zinc anode to prevent galvanic corrosion. Galvanic corrosion is the corrosion process occurring when different metals are submerged in an electrolyte. Seawater is an electrolyte and submerged metal components must be properly protected. The anodes will need to be changed when they are 75% of their original size. Refer to the Routine Maintenance chapter of this manual for information on maintaining zinc anodes.

To discourage any marine growth on the tabs or actuators, antifouling paint can be applied. When applying paint to the actuator, make sure it is fully retracted. Do not paint the stainless ram above the area that is exposed when retracted. The bottom paint will damage the O-ring seals when the ram is retracted and allow seawater to enter the actuator motor. Contact your dealer or the trim tab manufacturer for information regarding the correct bottom paint for the trim tabs.

Refer to the trim tab owner's manual for additional maintenance information, specifications, trouble-shooting and operating instructions.

## **Bow Thruster Maintenance (Optional)**

The bow thruster is mounted in the forward bilge below the forward bow seat, Periodically inspect the components inside the hull for leaks and for loose or corroded electrical connections. Signs of leaks and loose or corroded electrical connections should be corrected immediately by a qualified marine technician.

Marine growth, weeds and debris can interfere with the proper operation of the bow thruster so you should inspect the tunnel regularly and clean as necessary. This is particularly important when operating in areas with weeds or if the thruster is



Typical Trim Tab - Dual Actuators

not responding normally. You should also check the propeller. If the propeller is damaged or heavily contaminated, it should be replaced.

The thruster is protected from galvanic corrosion by an anode on the propeller shaft. The anode should be inspected regularly and changed when it is 75% of it's original size.

If the boat is kept in the water, the anode should be inspected at least once every 3-4 months. Antifouling paint can be applied to the tunnel and underwater components to discourage marine growth. Bow thrusters have specific requirements for the type of antifouling paint that can be used and where it can be applied. Applying the wrong paint or paint that is not applied correctly can damage the bow thruster and void the warranty. Contact your authorized Everglades dealer or the bow thruster manufacturer for information regarding the correct bottom paint and application.

Refer to the bow thruster owner's manual for additional maintenance information, specifications, troubleshooting and operating instructions.

**Everglades**<sup>®</sup>

by Dougherty \_

THIS PAGE WAS LEFT BLANK INTENTIONALLY



# FUEL SYSTEM

# 5.1 General

The gasoline fuel system used in Everglades boats is designed to meet or exceed the requirements of the U.S. Coast Guard, the Boating Industry Association and the American Boat and Yacht Council in effect at the time of manufacture.

All gasoline fuel systems have been factory inspected and pressure tested in accordance with regulations in effect at the time of manufacture. This inspection assures that the system is air tight, leak proof and safe. It is the responsibility of the purchaser to maintain it in that condition. Make frequent inspections to assure that no deterioration or loosening of connections is resulting from vibration.

DO NOT LET THE ODOR OF GASOLINE GO UNCHECKED. ANY ODOR OF GASOLINE MUST BE IMMEDIATELY INVESTIGATED AND STEPS TAKEN TO PROTECT THE BOAT AND ITS OCCUPANTS UNTIL THE PROBLEM IS CORRECTED. IF THE ODOR OF GASOLINE IS NOTED, SHUT OFF ALL ENGINES AND ELECTRICAL EQUIPMENT. INVESTIGATE AND CORRECT THE SITUATION IMMEDIATELY. HAVE ALL PASSENGERS PUT ON PERSONAL FLOTATION DEVICES AND KEEP A FIRE EXTINGUISHER READY UNTIL THE SITUATION IS RESOLVED.

DANGER

## **Fuel Withdrawal Tubes**

The fuel withdrawal tubes are positioned in the fuel tank to achieve optimum fuel usage, fuel line routing, etc. At certain speeds and hull trim angles, the fuel supply at the withdrawal tank location can increase or decrease accordingly. Be extremely careful when attempting to operate the boat when low on fuel. Though some fuel may be in the tank, the relative trim angle of the boat may cause the fuel to flow away from the withdrawals.

# **Fuel Gauge**

Indicates the amount of fuel in the tank. Due to the mechanical nature of the fuel sender, variations in readings during various speeds of operation may occur. This system is merely a relative indication of the available fuel supply and not a calibrated instrument.



Fuel Fill

# **Fuel Fill**

Fuel fill deck plate is located on the port gunnel and is marked "GAS." The fuel fill is opened by turning it counter clockwise with a special key. Be sure to use the proper type and grade fuel. Refer to the engine owner's manual for additional information on the fuel requirements for your engines.

#### **Notice:**

Do not overtighten the fuel cap. If the cap is overtightened, the O-ring seal could be damaged allowing water to contaminate the fuel system.

## **Fuel Tank Vent**

There is a vent fitting for each gasoline fuel tank on the port side of the hull. While the tank is being filled, the air displaced by the fuel escapes through the vent. When the tank is full, fuel will be ejected from the fuel vent.

After fueling, replace the fill cap and wash the areas around the fuel fill plate and below the fuel vent. Residual fuel left on the deck and hull sides can be dangerous and will yellow the fiberglass or damage the striping.

by Dougherty \_

# **Fuel System**

# 5.2 Outboard Fuel System

The gasoline fuel system has one fuel tank that fills from the port gunnel. The starboard engine is supplied by the starboard fuel line and the port engine is supplied by the port fuel line. There is an on/off valve for each supply line located on the fuel tank near each withdrawal tube. The valves provide a means to turn off the fuel supply to service the fuel system.

Fuel withdrawal lines are equipped with antisiphon valves where the lines attach to the fuel tanks. These valves prevent gasoline from siphoning out of the fuel tank should a line rupture.



DO NOT REMOVE THE ANTI-SIPHON VALVES FROM THE SYSTEM. SHOULD AN ANTI-SIPHON VALVE BECOME CLOGGED, CLEAN AND REINSTALL OR REPLACE. IF A FUEL LINE SHOULD LEAK, ANTI-SIPHON VALVES PREVENT A SUBSTANTIAL AMOUNT OF FUEL FROM FLOWING INTO THE BILGE. ANTI-SIPHON VALVES ARE REQUIRED TO BE INSTALLED IN ALL BOATS EQUIPPED WITH GASOLINE ENGINES BY THE U.S. COAST GUARD

## **Fuel Filter**

A fuel filter for each engine is installed in the stern bilge. The filters are accessed through the hatch at the rear of the cockpit sole on the 325 Pilot and through the center access hatch in the splashwell on the 295 Pilot. If your boat is equipped with Mercury Verado engines, the fuel filters are mounted on each engine.

The filters are the water separator type and should be serviced frequently to assure an adequate supply of clean, dry fuel to the engines. It is recommended that the filters are inspected periodically and the elements changed as needed.

There is a primer bulb in each fuel line located near the fuel filters or between the fuel tank and the engines that is used to prime the fuel system after service or as required. See Fuel System Maintenance and the engine owner's manual for additional information regarding fuel filters and the outboard engine fuel system.

## Notice:

Clean fuel is especially important in fuel injected engines. The engine manufacturer's recommendations for fuel filter maintenance must be followed exactly.



**Everglades**<sup>®</sup>

295 Pilot Fuel Filters Below Splashwell



295 Pilot Primer Bulb Below Splashwell



325 Pilot Fuel Filters and Primer Bulbs in Systems Compartment

by Dougherty



# **Fuel System**



#### Notice:

The procedure to prime the fuel system on outboard engines is specific to the type and model of engines on your boat. You should refer to engine manufacturer owner's manual for the priming procedure for your engines.

# 5.3 Fueling Instructions



ENGINE IS RUNNING. FILL THE FUEL TANK IN AN OPEN AREA. DO NOT FILL THE TANKS NEAR OPEN FLAMES.

TO PREVENT DAMAGE TO THE FUEL SYSTEM, USE ONLY A GOOD GRADE OF GASOLINE FOR GASOLINE ENGINES. DO NOT USE FUEL THAT CONTAINS HARSH ADDITIVES OR IS AN ALCOHOL BLEND OF HIGHER CONCENTRATION THAN RECOMMENDED BY THE ENGINE MANUFACTURER. ANY DAMAGE DONE TO THE FUEL SYSTEM THAT IS THE **RESULT OF USE OF AN ALCOHOL BLEND IS NOT COVERED** BY THE EVERGLADES WARRANTY. REFER TO THE ENGINE MANUFACTURER OWNER'S MANUAL REGARDING FUEL **REQUIREMENTS FOR YOUR ENGINES.** 

CAUTION

WARNING 

DO NOT CONFUSE THE FUEL FILL DECK PLATE WITH THE WATER OR WASTE PUMP OUT DECK PLATE. THESE PLATES ARE LABELED ACCORDINGLY. IF GASOLINE OR DIESEL FUEL IS ACCIDENTALLY PUMPED INTO THE WATER OR WASTE TANK, DO NOT ATTEMPT TO PUMP IT OUT YOURSELF. WATER AND WASTE PUMPS ARE NOT DESIGNED TO PUMP FUEL AND A FIRE OR EXPLOSION COULD RESULT. CONTACT YOUR DEALER OR THE EVERGLADES CUSTOMER SERVICE DEPARTMENT FOR ASSISTANCE IN HAVING THE FUEL PROFESSIONALLY REMOVED.

## To fill the fuel tank at a marina, follow this procedure:

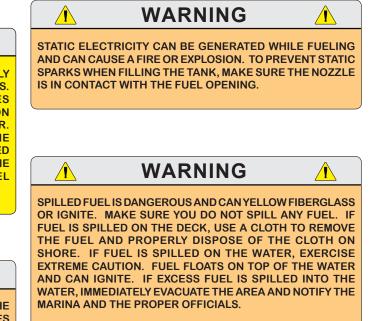
- 1. Make sure all switches are in the OFF position.
- 2. Make sure the boat is securely moored.

- 3. Make sure all passengers leave the boat.
- 4. Estimate how much fuel is needed and avoid over filling the tank.

#### Notice:

When the fuel tank is full, fuel will come out through the fuel vent. The fuel vents are located on the side of the hull.

- 5. A special key to open the fuel cap is supplied.
- 6. Turn the key counter clockwise to open the cap.
- 7. Remove the cap.
- 8. Put the nozzle in the fuel opening.



- 9. Fill the fuel tank slightly less than the rated capacity to allow for expansion to avoid spilling fuel out of the vents and fuel fill.
- 10. Remove the nozzle.
- 11. Install and tighten the fuel cap. Be careful not to overtighten the cap.
- 12. Check the fuel compartment and below the deck for fuel odors. If you smell fuel, do not start the engines.

by Dougherty \_

# **Fuel System**

Λ



# WARNING

TO REDUCE THE RISK OF A FIRE AND/OR EXPLOSION, DO NOT START THE ENGINES WHEN FUEL FUMES ARE PRESENT. FUEL FUMES ARE DANGEROUS AND HARMFUL TO YOUR HEALTH.

MAKE SURE ALL GASOLINE ODORS ARE INVESTIGATED IMMEDIATELY.

# 5.4 Fuel System Maintenance

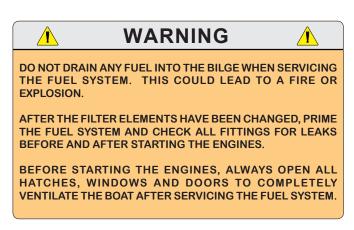
Periodically inspect all primer bulbs, connections, clamps and hoses for leakage, damage or deterioration. Replace as necessary. Spray the valves, tank fuel gauge senders and ground connections with a metal protector.

Frequently inspect and lubricate the fuel fill cap O-ring seal with Teflon or silicone grease. The O-ring seal prevents water from entering the fuel system through the fuel fill cap and it should be immediately replaced if there is any sign of damage or deterioration.

The fuel vent screen should be clear and free from corrosion and salt buildup. The screen will prevent insects and other foreign matter from contaminating the fuel and fuel system. The fuel vent should be replaced if the vent or screen is damaged or badly corroded. Fuel vent screens that are clogged will prevent the fuel tank from venting properly and make filling the fuel tank difficult or cause fuel supply problems to the engines.

Contaminated fuel may cause serious damage to your engine. Fuel filters must be checked for corrosion and deterioration frequently. Fuel filters must be changed at least once a season or more frequently depending on the type of engine and the quality of the fuel. Please refer to the engine or fuel filter manufacturer's instructions for information on servicing and replacing the fuel filter. The age of gasoline can effect engine performance. Chemical changes occur as the gasoline ages that can cause deposits and varnish in the fuel system as well as reduce the octane rating of the fuel. Severely degraded fuel can damage the engine and boat fuel tank and lines. Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month, a fuel stabilizer should be added to the gasoline to protect the fuel from degradation. Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel stabilizers recommended for your engine.

In many states, most gasoline is blended with ethanol alcohol. Ethanol is a strong solvent and can absorb water during periods of storage. You should refer to the engine operating manual for information regarding alcohol blended fuels and how it affects the operation of your marine engine.





# **ELECTRICAL SYSTEM**

# 6.1 General

Your Everglades is equipped with 120 volt AC and 12 volt DC electrical systems. The AC system draws current from shore power outlets at dockside. The DC system draws current from on board batteries.

Your boat and engine charging system is designed for 12 volt, lead acid, wet cell marine batteries. They will require similar maintenance as those found in automobiles.

All wires in the electrical systems are color coded to make identifying circuits easier. Wiring schematics have been included with this manual to aid in following an individual circuit of the boat.

# 6.2 DC System Overview

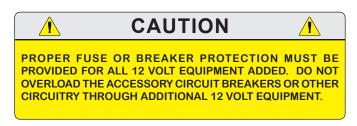
The 12 volt system is a fairly standard marine system. There are three batteries, one for the starboard engine, one for the port engine and one for the house and electronics on the 295 Pilot. There are four batteries, one battery for each engine and two batteries in parallel for the house and electronics on the 325 Pilot.

The batteries for the 295 Pilot are located in the compartment behind the stern bench seat. The batteries for the 325 Pilot are in the stern bilge below a hatch in the cockpit sole. They are controlled by three battery switches, one for the port engine, one for the starboard engine and one for the house 12 volt accessories and the electronics.

The batteries can be charged by the engines or by the battery charger when connected to shore power.

Most 12 volt power is distributed to the 12 volt accessories through individual circuit breakers and fuses located in panels near the batteries and at the helm. All circuit breakers are labeled by the name of the circuit they protect. Main circuit breakers near the batteries or in the battery switch panel protect the primary circuits for the DC main, electronics, Windshield, windlass and power steering system. Additional fuses near the main circuit breakers protect continuous power circuits for the stereo memory, remote battery switches, emergency parallel, automatic switches for bilge pumps and the shower sump float switch. Most 12 volt accessories are operated directly by switches in the helm switch panel, Hardtop switch panel or the head compartment. Most accessory circuits are protected by "push to reset" circuit breakers in the head compartment DC panel.

Main breakers or fuses located on each engine protect the ignition systems and gauge panel display. Yamaha engine electrical circuits are protected by fuses located in a fuse panel on the side of the engine. The fuse panel is equipped with a spare fuse for each circuit. Always replace fuses used with the fuse specified by Yamaha or your engine manufacturer. Refer to the engine owner's manual for more information on the fuses, fuse panels or circuit breakers on your engines.



# 6.3 Batteries and Battery Switches

The DC electrical system on your boat is designed for wet cell marine batteries. Do not attempt to use gel cell, absorbed glass mat or other non wet cell batteries. The engine charging system and the battery charger are not designed to recharge these batteries which could cause unusually short battery life, engine starting problems and damage to the DC charging systems. You should also not mix the size or brand of wet cell batteries. Always consult your Everglades dealer before changing the type of batteries in your boat.

#### **Batteries and Battery Switches** 295 Pilot Batteries and Battery Switches

The 295 Pilot has provision for three batteries located in the systems compartment behind the aft bench seat. One for each engine and one for the house and electronics circuits. These batteries should be of the size and capacity recom-

# **Everglades**<sup>®</sup>



295 Pilot Battery and Parallel Switches

mended by the manufacturer of your engines. These specifications should be considered to be the minimum size battery required. Consider increasing the capacity of the batteries if you will be trolling, drift fishing or have extensive electronics on board. Larger batteries will give you additional capacity to operate the baitwell, DC accessories, optional DC air conditioner and electronics at low speed when the charging system output from the engines is minimal. Refer to the engine owner's manual for additional information on the battery requirements for your engines.

There are three remotely activated battery switches and one remotely activated emergency parallel switch located in the systems compartment. The remote battery switches and emergency parallel switch are activated by special switches in the helm switch panel. Each battery or the emergency parallel switch has a manual override that can activate (enable) or deactivate (disable) the switch if the remote switch or relay fails. The manual override is a yellow knob on each battery switch that can be pressed to manually activate the switch or rotated to reactivate remote activa-



295 Pilot Voltage Sensitive Relays Pilot

tion of the switch or to lockout the switch in the OFF position when servicing the electrical system. The normal operating position for each switch is the "Enabled" Position. Refer to the instructions printed on each switch and/or the battery switch operating manual for additional information on the remotely activated switches.



# **Everglades**<sup>®</sup>



325 Pilot Battery and Emergency Parallel Switches



325 Pilot Voltage Sensitive Relays

#### **325 Pilot Batteries and Battery Switches**

The 325 Pilot has provision for four batteries mounted in fiberglass battery boxes in the systems compartment below the cockpit sole. One battery for each engine and two in parallel for the house and electronics circuits. These batteries should be of the size and capacity recommended by the manufacturer of your engines. These specifications should be considered to be the minimum size battery required. Consider increasing the capacity of the batteries if you will be trolling, drift fishing or have extensive electronics on board. Larger batteries will give you additional capacity to operate the baitwell, DC accessories, optional DC air conditioner and electronics at low speed when the charging system output from the engines is minimal. Refer to the engine owner's manual for additional information on the battery requirements for your engines.

There are three remotely activated battery switches and two remotely activated emergency parallel switches located in an enclosed panel at the front of the systems compartment. The remote battery switches and emergency parallel switches are activated by special switches in helm switch panel. Each battery or emergency parallel switch has a manual override that can activate (enable) or deactivate (disable) the switch if the remote switch or relay fails. The manual override is a yellow knob on each battery switch that can be pressed to manually activate the switch or rotated to reactivate remote activation of the switch or to lockout the switch in the OFF position when servicing the electrical system. The normal operating position for each switch is the "Enabled" Position. Refer to the instructions printed on each switch and/or the battery switch operating manual for additional information on the remotely activated switches.

#### **Remote Battery Switch Operation**

Each battery switch and the emergency parallel switch is controlled by a single switch at the bottom of the helm switch panel. Slide the label down and press the top of the remote switch to engage the battery switch. A red light will illuminate to indicate that the battery is now ON. To turn off, simply slide the label up and press the bottom of the momentary switch. The red light may not turn off immediately or will slowly fade out if there are no loads present on the system. This is normal as the capacitors in the system drain.

Automatic voltage sensitive relays (VSR) control the charging of the engine and House batteries whenever an engine is operating. The House and engine batteries can be temporarily connected in parallel by the emergency parallel switch in the

by Dougherty

**\_\_\_\_ Everglades**"

helm to provide additional starting current for each engine. The engine and house batteries are also charged by the battery charger whenever it is operating.

The VSR battery isolator systems manage the charging current for the 12 volt system whenever the engines are running. The systems automatically sense the condition of each battery and direct the available current to the batteries that require charging. When one or both engines is started, the engine alternator(s) start to recharge the batteries. This charging current passes through the VSR sensing circuits. The circuits sense the charge and it is split between the batteries, with the lowest battery receiving the most charge. When the engines are turned off, the charging stops and the sensing circuit turns off each VSR, disconnecting the batteries from the charging circuit thereby automatically isolating the batteries from one another.

When in port or at anchor, the port and starboard engine switches should be off. Only the battery switch that activates the House battery should be on. This will keep both engine starting batteries in reserve for starting the engines.

### Notice:

Current is supplied to the automatic switches for the bilge pumps when the batteries are connected and the battery switches are off.

#### Notice:

The manual battery switches completely bypass the remote switches when they are activated. The circuits cannot be turned off using the remote battery switches on the helm panel if the circuits have been activated by the automatic switches.



Remote Battery Switches House Switch in ON Position Engine and Parallel Switches in OFF Position



# 6.4 DC System Switch and Circuit Breaker Panels

# **Ignition Switch Panels**

Ignition switch panels are unique to each engine manufacturer and the engine control options selected. Your dealer will provide you with the proper starting procedure for your boat at the time of delivery. Additional information for the ignition switch system installed in your boat is located in the engine and control system operating manuals included in your information packet.

## Yamaha Command Link Plus<sup>®</sup> Ignition

Most Everglades boats are equipped with Yamaha engines and the Command Link Plus<sup>®</sup> ignition key panels that offer the latest in technology and durability. For twin engine installations, these are "key" panels; which energize the ignition system of multiple outboards with only one key.

The Start/Stop panel is used in conjunction with the key panel and features lights which indicate when outboards are running and a start/stop button for each engine. This system greatly simplifies the starting and stopping process of your engines. For convenience and protection, engines can not be restarted while running.

## Starting procedure

Make sure the engines are down with the shift lever in the neutral position and your hand is on the control lever. Turn the ignition key to the ON position to activate the start button for both engines. Press and release the Start/Stop button for the port engine. The computer will automatically check all engine systems and start the engine. When the engine stabilizes, repeat the starting procedure for the starboard engine. Stop the engines by pressing the start/stop buttons again.

The engine ignition circuits are protected by fuses or circuit breakers located on each engine.

# 12 volt Helm Accessory Switch Panel

The main accessory switch panel is located at the helm. Most of the circuit breakers that protect the accessories are located in the head compartment DC panel. An LED light built into the toggle switches indicates that the circuit is activated.

### The following is a description of the accessories controlled by the main accessory switch panel:



Typical Yamaha Command Link Ignition and Engine Start/Stop Switch System

# **Fresh Water**

Activates the fresh water pump that supplies the fresh water washdown hose connector in the cockpit, windshield washer, marine toilet and the head sink and shower. The pump is the pressure demand type. A pressure switch automatically controls the water pump when the system is activated and properly primed.

## **Raw Water**

Activates the raw water washdown pump that supplies the raw washdown hose connector in the cockpit. The pump is the pressure demand type. A pressure switch automatically controls the water pump when the system is activated and properly primed.

## Windlass

This switch controls the windlass which is mounted to the deck above the rope locker. It is protected by a circuit breaker of the type and rating recommended by the windlass manufacturer that is located near the battery switches. Another circuit breaker on the DC panel protects the circuit for the windlass switch.

by Dougherty .

# **Everglades**<sup>®</sup>

**Everglades**<sup>®</sup>

The switch is a three-position switch. The center position is OFF. Moving the switch in one direction will pay the anchor line out. Moving the switch in the opposite direction will pull the anchor line in.

## **Baitwell Pump**

Activates the pump that supplies seawater to the baitwell.

## **Baitwell Recirc**

Activates the baitwell pump that recirculates the water in the baitwell.

## **Bait Light**

Activates the light in the baitwell.

## Fwd Bilge

Manually activates the forward bilge pump located in the bilge below the head compartment sole. The pump moves water out through a thru-hull fitting in the hull. The pump is also activated by an automatic switch that is activated whenever the batteries are connected. This pump will run as needed whenever the water in the bilge accumulates high enough to activate the automatic switch and turn off when the water is removed.

## Aft Bilge 1

Manually activates the aft bilge pump located in the stern bilge near the transom. The pump moves water out through a thru-hull fitting in the hull. The pump is also activated by an automatic switch that is activated whenever the batteries are connected. This pump will run as needed whenever the water in the bilge accumulates high enough to activate the automatic switch and turn off when the water is removed.

# Aft Bilge 2

Manually activates the aft bilge pump located in the stern bilge forward of aft pump 1. The pump moves water out through a thru-hull fitting in the hull. The pump is also activated by an automatic switch that is activated whenever the batteries are connected. This pump will run as needed whenever the water in the bilge accumulates high enough to activate the automatic switch and turn off when the water is removed.

# Notice:

The bilge pumps will start automatically when there is sufficient water in the bilge to activate the automatic switch. Each automatic switch is protected by a fuse located in the system compartment and is always supplied current when the batteries are connected.



Helm Switch Panel

## Horn

Activates the boat horn located on the hardtop.

## Fishbox FWD/AFT (295 Pilot)

Activates the pumps that drain the forward and aft fishboxes. The switch is a three-position switch. The center position is OFF. Moving the switch in one direction will activate the forward fishbox pump. Moving the switch in the opposite direction activates the aft fishbox pump.

To avoid damage to the pump, always monitor the water level as the pump drains the fishbox and turn it off immediately when draining is complete.

#### Notice:

There is no forward or aft fishbox pump on the 325 Pilot. Therefore, the Fishbox FWD/ AFT switch will be labeled ACC and Reserved for additional DC accessories installed by you or your Everglades dealer.



# **Everglades**<sup>®</sup>

## ACC

Reserved for additional DC accessories installed by you or your Everglades dealer.

#### House

Remotely activates the House battery switch. A red LED light in the switch glows when the battery switch it controls is activated. Slide the label down and press the top of the switch to activate the indicated battery switch. Slide the label up and press the bottom of the switch to turn the indicated battery switch off. The red light may not turn off immediately or will slowly fade out if there are no loads present on the system.

#### Engine 1

Remotely activates the Port Engine battery switch. A red LED light in the switch glows when the battery switch it controls is activated. Slide the label down and press the top of the switch to activate the indicated battery switch. Slide the label up and press the bottom of the switch to turn the indicated battery switch off. The red light may not turn off immediately or will slowly fade out if there are no loads present on the system.

#### Engine 2

Remotely activates the Starboard Engine battery switch. A red LED light in the switch glows when the battery switch it controls is activated. Slide the label down and press the top of the switch to activate the indicated battery switch. Slide the label up and press the bottom of the switch to turn the indicated battery switch off. The red light may not turn off immediately or will slowly fade out if there are no loads present on the system.

#### **Battery Parallel**

Activates the circuit that connects both engine starting batteries in parallel for extra battery power while starting the engines. When the switch is turned on, a relay is engaged that connects both engine starting batteries, when the switch is turned off, the relay is deactivated and the batteries are isolated.

#### **12 volt Receptacle**

Provides electrical current for portable 12 volt equipment. The receptacle is located on the starboard side of the helm near the windshield.

#### **MP3 Connection**

Located on the starboard side of the helm near the 12 volt receptacle. Provides an input for MP3 players to connect to the boat stereo system.



Hardtop Accessory Switch Panel

## **Hardtop Accessory Switch Panel**

The Hardtop accessory switch panel is located in the Hardtop liner above the helm. The circuit breakers that protect the accessories are located in the head compartment breaker panel. LED lights built into the switches indicate that the circuit is activated.

#### Windshield

A momentary, three-position switch that activates the hydraulic rams that raise and lower the windshield to provide ventilation for the helm area and/or improve visibility. The center position is OFF. Move the switch in one direction to lower the windshield. Move the switch in the opposite direction to raise the windshield. The switch returns to the OFF position when it is released.

## Wiper/Washer

A three position switch that activates the optional windshield wiper and washer. Press the lower position to turn the wiper OFF. Move the switch to the center position to activate only the wiper. Press the upper position to activate the washer and wiper simultaneously. Make sure the fresh water system is activated before using the windshield washer.

#### **Docking Lights**

Activates the lights in the hull on each side of the bow that illuminate the area in front of the boat for better visibility while docking at night.

by Dougherty .

## **Forward Spreader**

Activates the overhead light at the front of the Hardtop that illuminates the forward cockpit.

## **Aft Spreader**

Activates the overhead light at the rear of the Hardtop that illuminates the aft cockpit.

## Dash LT

Activates the lights above the helm area.

## Hardtop Light CTSY LT

A three position switch that actives the overhead lights in the in the Hardtop liner. The center position is OFF. Moving the switch in one direction will activate the white overhead lights. Moving the switch in the opposite direction activates the blue overhead lights.

### Blue lights have less effect on night vision and should be selected if you need to illuminate the helm area while navigating at night.

#### **Deck CTSY Lights**

Activates the cockpit lighting. Move the switch in one direction to activate white lights. Move the switch in the opposite direction to activate blue lights.

#### Nav/Anc

The switch is a three-position switch. The middle position is OFF. Moving the switch in one direction will activate the navigation lights. Moving the switch in the opposite direction activates the anchor light.

## **Underwater Lights (Optional)**

Activates the lights in the transom below the waterline.

### Additional DC Switches and Panels Trim Tab Switch

Located in the helm. This switch controls the trim tab planes located on the transom of the boat. It is protected by a fuse located in a fuse panel behind the helm. Please refer to the Helm Control Systems chapter for detailed information on the operation of the trim tab controls.

## **Engine Trim and Tilt Switches**

Located in the helm. These switches are typically installed in the engine throttle and shift controls. They control the trimming and tilting of the engines. Please refer to the Helm Control Systems chapter and the engine owner's manual



Head Compartment DC Circuit Breaker Panel

for information regarding the proper use of the tilt and trim switches.

#### Waste Discharge Switch

A key activated momentary switch located in the head compartment that controls the overboard discharge pump system for the holding tank and marine head system. Monitor the waste level in the tank while pumping and turn the waste discharge switch OFF immediately when pumping is complete.

The key must be removed from the switch whenever the discharge pump is not being operated.

## DC Circuit Breaker Panel

Power is distributed to most of the 12 volt accessories through individual "push to reset" circuit breakers located in the DC circuit breaker panel



# **Everglades**<sup>®</sup>

# **Everglades**<sup>®</sup>

in the head compartment. A main circuit breaker located in the systems compartment protects the system from an overload. Some 12 volt accessories are operated directly by the circuit breaker in the panel. Switches fed by the panel breakers activate other accessories.

The circuit breakers are labeled for the accessory circuit they protect. Circuit breakers labeled ACC are reserved for additional accessories not usually installed by the factory.

If a breaker trips, the reset button pops out and is visible through the silicone protective cover. Press the button to reset the tripped breaker. If the breaker trips again, find and correct the problem before resetting the breaker.



PROVIDED FOR ALL 12 VOLT EQUIPMENT ADDED. DO NOT OVERLOAD THE ACCESSORY CIRCUIT BREAKERS OR OTHER CIRCUITRY THROUGH ADDITIONAL 12 VOLT EQUIPMENT.

## **Power Ports**

A 12 volt power port is located below the gunnel on each side of the cockpit. The power ports provide a 12 volt DC power connection for downriggers or electric reels. The power ports are protected by fuses in a fuse panel behind the helm.

## **Main Circuit Breakers**

DC Power is distributed to the head compartment DC breaker panel, electronics and other main circuits through heavy duty circuit breakers located in the systems compartment near the battery switches. These main circuits are deactivated when the House battery switch is OFF.

The primary circuits for the 12 volt accessories are protected and powered by heavy duty circuit breakers. The breakers are supplied power whenever the House battery switch is on. These are heavy duty circuit breakers that are mounted either above the battery switches on the 295 Pilot or in the battery switch panel on the 325 Pilot.

## **295 Pilot Heavy Duty Breakers**

These breakers are equipped with a red "push to test" button and a black or yellow reset lever. If this circuit breaker is tripped by an overload, a



295 Pilot Main Circuit Breakers



325 Pilot Main Circuit Breakers



325 Pilot Windlass Heavy Duty Circuit Breaker

by Dougherty

# **Everglades**<sup>®</sup>

yellow or black lever near the center of the breaker will be visible and be pointing downward. Reset the breaker by pushing the lever until it resets and locks in the "On" position. The circuit breaker can be tested for proper operation by pressing the red test button.

## **325 Pilot Heavy Duty Breakers**

The main circuit breakers for the 325 Pilot are mounted to the battery switch panel in the system compartment. Most of the circuit breakers are activated or reset by toggle switches in the panel. The windlass breaker is a heavy duty breaker with a red, "push to reset" button that requires a firm push to reset it trips. This breaker is always activated when the House circuit is on, unless it has been tripped by an overload.

## Notice:

If a main circuit breaker trips, always make sure the problem that caused the breaker to trip is found and corrected before resetting the breaker.

# The following are the main circuits supplied and protected by heavy duty circuit breakers:

## Main

Protects the circuit that supplies 12 volt current to the head compartment DC breaker Panel and accessory fuse panels behind the helm. This circuit is deactivated when the House battery switch is off.

# **Electronics**

Protects the main circuit that supplies 12 volt current to the electronics fuse panel in the helm. This circuit is deactivated when the House battery switch is off.

# Windshield

Protects the circuit that supplies 12 volt current to the hydraulic system that raises and lowers the windshield. This circuit is deactivated when the House battery switch is off.

## **Power Steering (Optional)**

Protects the circuit that supplies 12 volt current to the hydraulic steering assist system. This circuit is deactivated when the House battery switch is off.

## Windlass

Protects the circuit that supplies 12 volt current to the windlass main circuit. This circuit is deactivated when the House battery switch is off.



325 Pilot Continuos Power Fuse Panel

# **Continuous Power Fuse Panel**

Located near the battery switches. The fuses in the panel protect the circuits that are always active not turned off by the battery switches. The continuous power circuits are always supplied current when the House batteries are connected.

## The fuses in this panel provide continuous power and protect the circuits for the following accessories:

#### **Stereo Memory**

Protects the circuit that supplies continuous 12 volt electrical current to the memory circuit in the stereo.

## Shower FLT

Protects the circuit for sump pump for the head compartment and shower drain. The sump is fully automatic and is accessed through a hatch in the head compartment sole.

## **Fwd Blg FLT**

Protects the circuit for the automatic switch that activates the bilge pump located in the bilge below the head compartment. The pump and switch are accessed through a hatch below the head compartment sole. A red light in the Forward Bilge Pump switch will be lit whenever the pump is activated.



## Aft 1 FLT

Protects the circuit for the automatic switch that activates the stern bilge pump located in the bilge near the transom. A red light in the Aft 1 Bilge Pump switch will be lit whenever the pump is activated.

### Aft 2 FLT

Protects the circuit for the automatic switch that activates the mid stern bilge pump located in the bilge forward of aft bilge pump 1. A red light in the Aft 2 Bilge Pump switch will be lit whenever the pump is activated.

## **Battery All**

Protects the circuits for the remote main battery switches located in the helm switch panel. Each battery switch is equipped with a manual override to enable the operator to activate the switch in the event that the remote circuit fails. A red LED light glows when the switch is activated. The battery switches should always be turned off when leaving the boat unattended.

#### Notice:

The continuous power circuit breakers are always supplied current when the batteries are connected. These circuits are not deactivated when the battery switches are off.

#### **Electronics and accessory Fuse Panels**

There are three fuse panels located in the helm that are accessed through a hatch in the head compartment. The fuse panels are supplied power by the Main # 1 or Electronics Main breakers located in the systems compartment. Fuses in the panels protect the individual circuits for electronics or other accessories mounted in your boat.

# 6.5 Bonding System

Your boat is equipped with a bonding system that interconnects all metal underwater hardware and thru-hull fittings to ensure that they are of the same electrical potential. Anodes are attached to the bonding system at the engines. There is also an anode on the transom on the 325 Pilot. The anodes deteriorate before the other metals, thereby protecting the underwater metals from galvanic corrosion or stray electrical current. Since the anodes are sacrificial, it is important to monitor them and replace them when they have deteriorated to 50-75% of their original size.



**Everglades**<sup>®</sup>

325 Pilot Typical Electronics and Accessory Fuse Panels



325 Pilot Transom Anode

The engine bonding system is connected to the DC ground and the earth ground wire for the AC electrical system for the battery charger. It provides a path to the safety earth ground in the event of a fault in the shore earth ground connection.

by Dougherty \_

# **Everglades**<sup>®</sup>

# 6.6 AC Electrical System

# DANGER

TO REDUCE THE RISK OF ELECTRICAL SHOCK IN WET WEATHER, AVOID MAKING CONTACT WITH THE SHORE CABLE OR MAKING A CONNECTION TO A LIVE SHORE OUTLET. NEVER SPRAY WATER ON ELECTRICAL CABLES WHILE WASHING DOWN DECKS.

TO REDUCE THE POSSIBILITY OF AN ELECTRICAL SHOCK, IT IS IMPORTANT THAT THE AC GROUND SYSTEM IS FUNCTIONING PROPERLY AND THAT A PROPER CONNECTION EXISTS BETWEEN THE SHORE POWER CORD AND THE SHORE POWER INLET AND THE OUTLET GROUND CIRCUITS. IF THERE IS ANY DOUBT ABOUT THE INTEGRITY OF THE GROUND CIRCUIT, A QUALIFIED MARINE ELECTRICIAN SHOULD BE CONTACTED IMMEDIATELY AND THE AC CURRENT SHOULD BE DISCONNECTED UNTIL THE NECESSARY REPAIRS ARE COMPLETED.

# **Shore Power Connection Procedure**

If the dockside outlet includes a disconnect switch, turn it to the "OFF" position. To avoid strain on the cable make sure it has more slack than the mooring lines. Dress the cable so that it cannot be damaged by chafing between the boat and the dock. Make sure the cable does not come in contact with the water. Then connect the cable in the plug inlet making sure the connection plug includes a three-prong plug with a ground wire. Turn the dockside disconnect switch or circuit breaker to the "ON" position and check that the battery charger is operating properly. If the battery charger is not working, turn off the shore disconnect switch and remove the cable. Contact vour dealer or a qualified electrician to find and correct the problem.



295 Pilot

Shore Power Inlet Connection

325 Pilot Shore Power Inlet Connection

# WARNING

DO NOT ATTEMPT TO CORRECT THE WIRING YOURSELF. ELECTRIC SHOCK CAN CAUSE SEVERE INJURY OR EVEN DEATH. ALWAYS HAVE A QUALIFIED ELECTRICIAN CHECK WIRING.

KEEP CHILDREN AWAY FROM ANY ELECTRICAL CABLES OR EQUIPMENT.

UNDETECTED FAULTS IN THE AC BATTERY CHARGING SYSTEM COULD CAUSE THE WATER AROUND THE BOAT TO BECOME ENERGIZED. THIS COULD CAUSE A SEVERE SHOCK OR EVEN DEATH TO SOMEONE IN THE WATER NEAR THE BOAT. NEVER SWIM OR ALLOW SWIMMING AROUND THE BOAT WHEN THE BATTERY CHARGING SYSTEM IS ACTIVATED BY THE SHORE POWER CONNECTION.

# **Shore Power Disconnection Procedure**

Turn the disconnect switch on the dockside outlet to the OFF position.

Disconnect the cable from the dockside outlet and replace the outlet caps. Disconnect the cable from the boat and replace the inlet cap. Store cable.

The power cord used for the battery charger is not equipped with lock rings on the shore side or boat connector plugs. The battery charger has built in reverse polarity protection and the circuit is not equipped with a reverse polarity light.

by Dougherty

## **Battery Charger Operation**

AC electrical current is supplied directly to the automatic battery charger, located in the systems compartment, by the shore power cord and AC inlet plug near the transom door. The battery charger will charge and maintain the 12 volt batteries simultaneously when activated. It is fully automatic.

The wires that supply DC charging current to the batteries are protected by internal fuses in the battery charger and in-line fuses, one for each battery output wire, near each battery. The inline fuses protect the DC charging circuit from the batteries to the charger. The internal fuses in the charger protect the DC charging circuit from the charger to the batteries. Refer to the battery charger owner's manual for more information on the features and operation of the battery charger.

The charge to the engine batteries can be monitored by using the volt meters in the engine gauge display or the LED lights on the charger. To monitor the engine batteries with the volt meters in the engine gauge display, activate the charger and turn the engine battery switches on. Turn the ignition key switch for each engine to the ON position (DO NOT START THE ENGINES) and read the voltage on the volt meter for each engine. If the batteries are in good condition and charging properly, the volt meters will indicate between 12 and 14.5 volts. If the reading is below 12 volts, then the battery is not accepting a charge or the charger is not working properly. Always turn the ignition switches off immediately after the monitoring is complete when using the voltmeters in the engine gauge cluster.



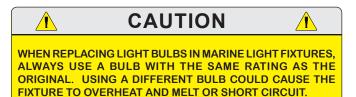
Typical Battery Charger

# **Everglades**<sup>®</sup>

# **Everglades**<sup>®</sup>

# 6.7 *Electrical System Maintenance* DC Electrical System Maintenance

At least once a year, spray all exposed electrical components behind the helm, in the transom area and in the plugs with a protector. Exterior light fixture bulbs should be removed and the metal contact areas coated with a non-water soluble lubricant like Teflon or Silicone grease. The sockets should be sprayed with a protector. Care must be taken not to get any oil or grease on the glass portion of the bulbs as this will cause the bulb to overheat and burn out. LED lights are sealed and not serviceable.



Check all below deck wiring to be sure it is properly supported, that the insulation is sound and that there are no loose or corroded terminals. Corroded terminals should be thoroughly cleaned with sandpaper or replaced, tightened securely and sprayed with a metal and electrical protector. Inspect all engine wiring.

Your boat is equipped with batteries that are installed by your dealer. Some marine batteries are maintenance free with cells that are sealed and do not require inspection or service. Standard marine batteries are the wet cell type that are not maintenance free. They will require the following inspection and service.

Check the electrolyte level in the batteries regularly and add distilled water as necessary. If the batteries are frequently charged by the automatic battery charger, the electrolyte level will have to be checked more often. The correct fluid level in the cells is usually approximately 1/4 to 1/2 inch above the plates. If fluid is needed, fill to the proper level with distilled water. Do not over fill and only use distilled water!

Keep the battery tops clean and dry. Dirt and water can conduct electricity from one post to the other causing the battery to discharge.



295 Pilot System Compartment and Batteries



325 Pilot Port Battery Bank and Battery Box

The battery posts should be kept free of corrosion. Remove the cables and clean the posts and cable clamps with a battery post cleaner or sandpaper as required. Coating the battery posts and cable clamps with Teflon or Silicone grease will protect them and reduce corrosion. Battery cables, both hot and ground, must be replaced when they show signs of corrosion or fraying. Deteriorated cables cause a considerable voltage loss when high currents are drawn, as for starting the engines.



# **Everglades**<sup>®</sup>

# 🔥 WARNING 🥂

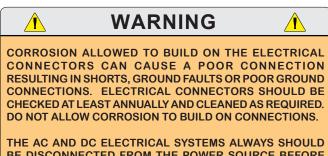
NEVER USE AN OPEN FLAME IN THE BATTERY STORAGE AREA. AVOID STRIKING SPARKS NEAR THE BATTERY. A BATTERY CAN EXPLODE IF A FLAME OR SPARK IGNITES THE HYDROGEN GAS THE BATTERY EMITS WHILE BEING CHARGED.

# **AC Electrical System Maintenance**

Periodically inspect all wiring for nicks, chafing, brittleness, improper support, etc. Examine the shore power cord closely for cracks in the insulation and corrosion in electrical connectors. Spraying receptacles and electrical connections with an electrical contact cleaner or a metal and electrical protector will reduce corrosion and improve electrical continuity.

Inspect all wiring for proper support, sound insulation and tight terminals.

The entire AC circuitry, especially the shore power cord, should be seasonally tested for proper continuity by an experienced electrician. This will detect any shorts, open wires or ground faults.



BE DISCONNECTED FROM THE POWER SOURCE BEFORE INSPECTING OR SERVICING THE SYSTEM. NEVER SERVICE ANY COMPONENT OF AN ELECTRICAL SYSTEM WHILE IT IS ENERGIZED.

# 6.8 DC Power Management

295 and 325 Pilot boats are typically equipped with a full array of electronics, fuel injected engines, stereo amplifier, DC air conditioning systems, spreader lights and other accessories that consume a significant amount of DC electrical power. All outboard engine charging systems are designed to provide maximum electrical output at or above cruising RPM. The electrical output from the charging system is considerably less at idle or trolling speeds. Additionally, each engine typically requires approximately 15 to 20 amps of charging system capacity to power the ignition system, fuel pumps and instruments.

Depending on the optional equipment and electronics installed on your boat, there may be times when the charging systems on your engines will not be able to meet the DC electrical power demand if to many accessories are activated while the boat is operating at idle or trolling speeds. Consequently, POWER MANAGEMENT PRACTICES may need to observed at slow speeds, particularly if your boat is equipped with a full electronics package and the optional DC air conditioning system.

The house battery system in your boat is designed to provide several hours of reserve capacity, which is adequate for most situations. However, you should be aware of the load each of your DC accessories draw and make sure you don't overload the capacity of the charging system for extended periods while operating the boat below cruising speed. Always monitor the volt meters while operating at slow speeds and turn off unnecessary equipment that draw high amperage loads if the volt meters indicate that the voltage in the batteries is below 12 volts. If necessary, reduce the electrical load by turning off or alternating the use of high draw DC accessories such as the DC air conditioner, radar units, stereo, spreader lights, etc.

If the house battery system that powers the electronics and accessories on your boat becomes critically discharged while underway at low speeds or trolling, make sure that you turn off all unnecessary DC equipment and run the boat engines at an RPM (usually 2000 RPM or hgher) that will provide a reading of the at least 13 volts on the volt meters to recharge the house batteries. Proper DC power management will prevent low voltage that can cause critical navigation equipment to become erratic or shutdown unexpectedly. Additionally, sound power management practices increase the life of your batteries and engine charging systems. You should contact your dealer if you have any questions regarding DC power management or the DC electrical system on your boat.

by Dougherty.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

# FRESH WATER SYSTEM

### 7.1 General

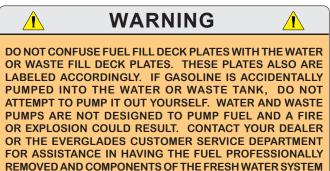
The fresh water system consists of a potable water tank, distribution lines and a distribution pump. The pump is equipped with an automatic pressure switch and is located near the water tank in the systems compartment. The tank is located in the system compartment bilge.



DO NOT FILL SYSTEM WITH ANYTHING OTHER THAN WATER. SHOULD THE SYSTEM BECOME CONTAMINATED WITH FUEL OR OTHER TOXIC FLUIDS, COMPONENT REPLACEMENT MAY BE NECESSARY.



Fresh Water Fill



REMOVED AND COMPONENTS OF THE FRI REPLACED AS NECESSARY.

### 7.2 Fresh Water System Operation

Fill the water supply tank slowly through the labeled deck plate located at the rear of the cockpit. After filling the water tank, partially open all faucets. The Fresh Water switch on the helm switch panel should be on. Allow the pump to run until all of the air is purged from the system and a steady stream of water is flowing from each outlet. Next, turn off the faucets one by one. As the pressure builds, the pump will automatically shut off.

When properly primed and activated the water system will operate much like the water system in a home. An automatic pressure sensor keeps the system pressurized. If the system has been recently filled or has not been used for an extended period, air bubbles may accumulate at the pump and the system may have to be reprimed.

Whenever the boat is left unattended, the Fresh Water switch should be placed in the OFF position.

CAUTION

 $\wedge$ 

DO NOT ALLOW THE FRESH WATER PUMP TO RUN DRY. THE FRESH WATER PUMP WORKS ON DEMAND AND WILL NOT SHUT OFF AUTOMATICALLY WHEN THE TANK IS EMPTY. THIS CAN RESULT IN DAMAGE TO THE PUMP. ALWAYS TURN THE FRESH WATER SWITCH OFF WHEN THE FRESH WATER SYSTEM IS NOT IN USE.

#### **Workstation Sink and Fresh Water Shower**

The sink in the cockpit workstation is equipped with fresh and raw water. The sink faucet converts to a retractable hand-held shower head.

To use the shower, pull the shower head out of fitting in the sink and the turn on the fresh water valve. Make sure the Fresh Water switch in the helm switch panel is activated before using the shower.

by Dougherty .

## Fresh Water System

# **Everglades**<sup>®</sup>

#### Head Sink and Shower

The vanity sink faucet converts to a retractable hand-held shower head. To use the shower, pull the shower head out of faucet and the turn on the water valve. Make sure the Fresh Water switch in the helm switch panel is activated before using the shower.

Shower water is drained overboard by the shower sump pump. The pump is automatically controlled by an automatic switch near the pump below a hatch in the head compartment floor.

#### **The Fresh Water Washdown**

The cockpit fresh water washdown hose connection is located on the starboard side of the cockpit and uses a standard garden hose connection. It is equipped with a valve that allows the flow of water to be turned on or off at the hose connection.

Make sure the Fresh Water switch in the helm switch panel is on before using the washdown hose and that the washdown faucet valve or hose spray nozzles are off when the fresh water system is activated.

### 7.3 Fresh Water System Maintenance

Information supplied with water system components by the equipment manufacturers is included with this manual. Refer to this information for additional operation and service data.

#### **Routine Maintenance**

The following items should be done routinely to maintain your fresh water system:

- Periodically remove and clean the water strainer located near the intake side of the fresh water pump. To clean the strainer, make sure the Fresh Water switch is off. Rotate the strainer bowl counterclockwise to release it. Remove and clean the screen with fresh water. Lubricate the O-ring lightly with Teflon or silicone grease and reinstall the strainer bowl.
- Remove the filter screens from the faucet spouts and eliminate any accumulation of debris. A build up of debris can cause the pump to cycle excessively.
- Periodically spray the pump and metal components with a metal protectant.



Typical Head Compartment Sink and Shower



295 Pilot Fresh Water Pump & Strainer

- The batteries must be properly maintained and charged. Operating the pressure pump from a battery with a low charge could lead to pump failure.
- Add a commercially available potable water conditioner to the water tank to keep it fresh.

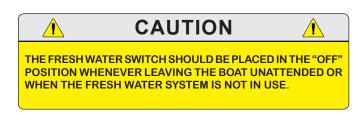


## Fresh Water System

# **Everglades**<sup>®</sup>

#### **Notice:**

The fresh water system must be properly winterized prior to winter lay-up. Refer to the section on winterizing for more information.

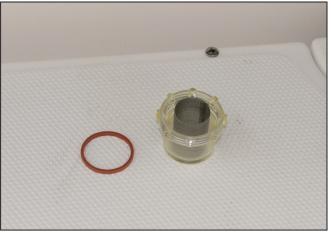


#### Sanitizing the Fresh Water Tank

The fresh water system should be sanitized if it has not been used for a long period or you are unsure of the quality of the water in the system.

The following steps can be used to sanitize the system:

- Activate the system, open all faucets and pump out as much water as you can.
- Make a chlorine solution by mixing two ounces of household chlorine bleach in a gallon of water. This mixture will treat approximately fifteen gallons. If the water tank on your boat is larger or smaller than 15 gallons, then adjust the mixture accordingly. Always mix the chlorine with water in a separate container first and never add straight chlorine to the fresh water tank.
- Fill the water tank half full with fresh water and pour the mixture into the water tank. Top off the tank.
- Activate the system and allow the water to run for about one minute at each faucet. Let the treated water stand for 4-6 hours.
- Drain the system by pumping it dry and flush with several tank fills of fresh water.
- The system should now be sanitized and can be filled with fresh water. If the chlorine smell is still strong, it should be flushed several more times with fresh water.



Typical Fresh Water Pump Strainer Removed for Cleaning



325 Pilot Fresh Water Pump and Strainer

#### Notice:

The quality of the water in marine freshwater systems can be questionable. We recommend that you avoid using the water from the freshwater system for drinking and cooking. You should only use bottled water for these purposes.

by Dougherty \_

THIS PAGE WAS LEFT BLANK INTENTIONALLY

## **RAW WATER SYSTEM**

### 8.1 General

In the raw or seawater system on the 295 Pilot, the baitwell pump is mounted to a seacock on a thru-hull fitting located in the stern systems bilge. The water system pressure pump is connected to an individual thru-hull valve. If the boat is equipped with the optional air conditioner, the cooling pump will be connected to an auxiliary fitting on the baitwell pump.

In the raw water system on the 325 pilot, the baitwell pump, pressure pump and optional air conditioner cooling pump are connected to individual valves mounted on a seawater manifold in the stern systems compartment. The intake for the manifold is equipped with a scoop and ball valve. Always make sure the ball valves are open before attempting to operate any component of the raw water system.

#### **Priming the System**

Make sure the valves are open and the Raw Water switch in the helm switch panel is on. Run the pressure pump by turning on the raw water washdown hose until all of the air is purged from the system and then turn the hose off. Turn the Baitwell pump switch to the ON position and run the baitwell pump until all of the air is purged from the system and turn the pump off.

If your boat is equipped with the optional air conditioning system, turn on the air conditioner. Monitor the discharge fitting for the air conditioning in the hull side. Water should begin to flow from the discharge fitting within 30 seconds. If water does not flow, the system may have an air lock or debris in the strainer restricting the water flow and causing the unit to automatically shut down. Investigate and correct the problem, then restart the air conditioner.

The intake for the baitwell centrifugal pump is equipped with a scoop and ball valve. If the pump runs but will not prime make sure the valve is open. If the pump still won't prime, it may be air locked. Make sure the valve is open and run the boat at or above 15 M.P.H. The water pressure from the scoop will force the trapped air through the pump



295 Pilot Baitwell Supply Pump and Seacock



325 Pilot Seawater Supply Manifold and Seacocks Baitwell Supply Pump, Raw Water Pressure Pump and Optional Air Conditioner Cooling Pump

and allow it to prime. If this procedure doesn't work, contact your Everglades dealer.

Closing the thru-hull valves before the boat is hauled from the water will help to eliminate air locks in raw water systems. The valves should also be closed whenever you leave the boat unattended.

#### Notice:

It may be necessary to reprime the raw water system if it is not used for an extended period and at the time of launching.

by Dougherty.

## **Raw Water System**

# **Everglades**<sup>®</sup>

### 8.2 Raw Water System Operation

A high pressure pump, controlled by a pressure sensor, is activated by the Raw Water switch located in the helm switch panel. When activated, the pressure switch will automatically control the pump that supplies the raw water hose connector.

As the pressure builds in the system, the pump will shut off. When the system is in use and the pressure drops, the pump will turn on. The water system is equipped with a strainer on the intake side of the pump. The strainer should be checked frequently and cleaned as necessary.

Whenever the boat is left unattended, the Raw Water switch should be placed in the OFF position.

#### **Washdown Hose Connector**

The raw water washdown hose connection is located on the port side of the cockpit below the gunnel and uses a standard garden hose connector. The 325 Pilot is equipped with an additional washdown hose connection in the anchor/windlass compartment. Each hose connection is equipped with a valve that allows the flow of water to be turned on or off.

Make sure the Raw Water switch in the helm switch panel is on before using the washdown hose and that the washdown faucet valve or hose spray nozzles are off when the water system is activated.

#### **Workstation Sink**

The sink in the cockpit workstation is equipped with fresh and raw water. The sink faucet converts to a retractable hand-held shower head.

To use the raw water spray head, pull it out of the fitting in the sink and make sure the Raw Water switch is on. Turn on the raw water faucet and activate the spray head using the thumb activated valve on the spray head.

## CAUTION

DO NOT ALLOW THE WATER PUMP TO RUN DRY. THE PUMP WORKS ON DEMAND AND WILL NOT SHUT OFF AUTOMATICALLY IF NO WATER IS AVAILABLE. THIS CAN RESULT IN DAMAGE TO THE PUMP. ALWAYS TURN THE RAW WATER SWITCH OFF WHEN THE RAW WATER SYSTEM IS NOT IN USE.



Typical Washdown Hose Connection



325 Pilot Baitwell



325 Pilot Baitwell Recirculation Pump

by Dougherty

## **Raw Water System**

# **Everglades**<sup>®</sup>

### 8.3 Baitwell

Seawater is provided to the baitwell by a 12 volt circulation pump. This pump is designed to carry a constant flow of water to the baitwell. The pump does not have a pressure sensor and is activated by the Baitwell Pump switch in the helm switch panel. There is also a light in the baitwell that is activated by the Baitwell Light switch.

An overflow built into the baitwell drain automatically controls the water level in the baitwell. Always turn the pump off at the switch panel when the baitwell is not in use.

To fill the baitwell, insert the plug into the drain fitting at the bottom of the baitwell. Make sure the seacock and the supply valve in the baitwell are open. Then activate the baitwell pump. When the water level reaches the overflow, it will begin to circulate.

When the recirculating baitwell is activated by the Baitwell Recirc switch, a separate pump will recirculate and aerate the water that is in the baitwell without drawing additional seawater into the system. A valve in the side of the baitwell is used to regulate the flow of oxygen in the water when the recirculating feature is activated.

The baitwell raw water intake is equipped with a speed scoop that will supply water to the baitwell if the pump should fail and helps prime the system during normal operation. To supply water to the baitwell using the scoop, make sure the seacock valve is open and run the boat at a speed above 15 miles per hour. Water will circulate through the baitwell and out the overflow.

To drain the baitwell, turn off the baitwell pump and remove the plug in the drain fitting. When the baitwell has completely drained, use the washdown hose to flush the baitwell and drain of debris.

The baitwell seacock valve should be closed whenever the baitwell is not in use. This will prevent water from entering the baitwell while the boat is cruising.

#### Notice:

Do not use the baitwell as a dry storage area when it is not in use. Seawater could accidently be delivered to the baitwell from the thru-hull fitting and damage equipment stored there.



325 Pilot Raw Water Pump and Strainer



295 Pilot Raw Water Pump and Strainer



A RUPTURED RAW WATER INTAKE OR PRESSURE LINE COULD CAUSE THE BOAT TO TAKE ON WATER. ALWAYS TURN ALL WATER RAW WATER SYSTEMS OFF AND CLOSE THE THRU-VALVES WHEN LEAVING THE BOAT UNATTENDED.

by Dougherty

## **Raw Water System**

# **Everglades**<sup>®</sup>

### 8.4 Air Conditioning Pump

The air conditioning unit is self-contained and seawater cooled. A 12 volt DC raw water pump supplies seawater that cools the condensing unit as it circulates through the system and is discharged overboard. The seawater pump for the air conditioner is located in the systems compartment and runs whenever the air conditioner is activated.

Seawater is supplied to the pump by a ball valve and hose connected to the raw water manifold or a thru-hull fitting in the systems compartment bilge. A sea strainer between the pump and ball valve protects the system from contaminants that could damage the pump or the air conditioning system. Make sure the pump receives adequate seawater by periodically cleaning the sea strainer. Refer to Raw Water System Maintenance in this chapter for information on cleaning the sea strainer.

You should refer to the air conditioner owner's manual for more information on the operation and maintenance of the seawater pump.

### 8.5 Raw Water System Maintenance

The following items should be done routinely to help maintain your raw water system:

- Check hoses, particularly the seawater supply lines, for signs of deterioration. Tighten fittings or replace deteriorated hoses and components as necessary.
- Periodically remove and clean the water strainers located near the intake side of the raw water pressure and optional air conditioner pumps. To clean the pressure pump strainer, make sure the Raw Water switch is off and close the valve at the thru-hull fitting. Rotate the strainer bowl counterclockwise to release it. Remove and clean the screen with fresh water. Lubricate the O-ring lightly with silicon or Teflon grease and reinstall the strainer bowl.
- Spray pumps and thru-hull valves with a protective oil periodically.
- The baitwell should be drained and cleaned after each use. Use only fresh water to clean and rinse the baitwell. Residue from soap can kill sensitive live bait.
- Operate all seacock valves at least once a month to keep them operating properly.



325 Pilot Air Conditioner Seawater Pump and Strainer

### **Cleaning the Air Conditioner Strainer**

- Turn off the air conditioner .
- Close the intake water ball valve at the raw water manifold.
- Turn the strainer bowl counterclockwise to remove it and remove the screen.
- Thoroughly flush the screen and the inside of the strainer bowl to remove foreign matter.
- Lubricate the seal with silicon or Teflon grease.
- Reassemble the strainer making sure that the bowl is tight.
- Open the seawater ball valve and check for leaks.
- Activate the air conditioner and monitor the flow of water out of the air conditioner thruhull fitting in the hull side. If no water is flowing after 30 seconds, shutdown the air conditioner and find and correct the problem.

Image: Constraint of the second sec

by Dougherty

# Chapter 9: DRAINAGE SYSTEMS

### 9.1 General

All water is drained by gravity to overboard thruhull fittings located in the hull above the water line. It is important to check the drain system frequently to ensure it is free flowing and that the hoses on the thru-hull fittings are secure and not leaking. Please take the time to become familiar with the location of all drain thru-hull fittings and valves.

## 9.2 Cockpit and Deck Drains

### **Cockpit Sole**

Your Everglades has either two or four (depending on the model) scupper drains located in the rear of the cockpit. A flap built into each transom scupper drain fitting on the 295 Pilot reduces the surge of seawater through the scupper and into the cockpit while maneuvering or in rough water. The scupper drain thru-hull fittings are in the trim tab wells on the 325 Pilot.

Water is channeled away from all hatches by a gutter or drain rail system. The water then drains overboard through the scupper drain system or other thru-hull drains in the hull.

Ball valves in each scupper drain hose on the 295 Pilot can be closed to prevent seawater from flowing into the cockpit through the scupper drain system in an emergency. These valves should always be open during normal operating conditions. Make sure to open and close each valve at least once a month to keep the valves free and ensure they will work if you need them.

#### **Workstation Sink**

The workstation sink is drained by gravity to a thru-hull fitting in the hull side.

#### Baitwell

The baitwell drains by gravity to a thru-hull fitting in the hull. The baitwell overflow drains to the baitwell drain system.

#### **Rope Locker**

The rope locker drains overboard thru a small drain hole in the bottom of the locker. It is important



325 Pilot Scupper Drains and Drain Rail



Rope Locker Drain

to inspect the drain frequently to remove any accumulated debris.

#### **Rod Lockers**

The rod lockers on each side of the forward casting platform drain by gravity to the bilge.

#### **Cup Holders**

All cup holders in the helm and cockpit areas drain by gravity to the cockpit sole.

by Dougherty.

## Drainage Systems

# **Everglades**<sup>®</sup>

#### 9.3 Fishboxes and Forward Storage Compartments 295 Pilot Fishboxes and Forward Storage Compartments Forward Fishbox

The forward fishbox below the cockpit sole is drained overboard by a pump out system located in the head compartment bilge. The pump out system is activated by the Fishbox FWD/Aft switch in the helm switch panel.

Monitor the water level as the pump drains the fishbox and turn it off immediately when draining is complete. The pump could be damaged if it is allowed to run dry for extended periods.

The fishbox can also be drained manually by removing the drain plug in the bottom of the fishbox when the boat is underway. A reverse scoop located below the drain plug creates a vacuum at the drain fitting whenever the boat is operating at speeds above 15 mph that will quickly drain the fishbox.

Manually draining the fishbox is a 2 person operation. One person to operate the boat and the other person to drain the fishbox while the boat is on plane. To drain the fishbox, set the boat speed at a slow planing speed (15 to 20 MPH.) Then remove the drain plug and monitor the water level as it drains. Reinstall and tighten the plug immediately when draining is complete and before slowing the boat below 15 mph.

The fishbox hatch drain rail drains by gravity to a thru-hull fitting in the hull below the water line near the fishbox pump. The seacock valve on the drain thru-fitting should be open during normal operation.

#### **Aft Fishbox**

The aft fishbox below the cockpit sole is drained overboard by a pump out system located in the systems compartment bilge. The pump out system is activated by the Aft Fishbox FWD/Aft switch in the helm switch panel.

Monitor the water level as the pump drains the fishbox and turn it off immediately when draining



295 Pilot Forward Fishbox Pump Out System



295 Pilot Forward Fishbox Pump out Strainer and Manual Drain Plug

is complete. The pump could be damaged if it is allowed to run dry for extended periods.

The fishbox hatch drain rail drains by gravity to the cockpit scupper drain system.

#### **Bow Storage Compartments**

The storage compartments below the casting platform/bow seats are drained by gravity to the bilge.



# **Everglades**<sup>®</sup>

#### 325 Pilot Fishbox and Forward Storage Compartments Aft Fishbox

The aft fishbox in the transom, just forward of the splashwell drains by gravity to a thru-hull fitting in the hull side above the waterline.

#### **Forward Bow Storage Compartment**

The forward storage compartment below the center bow casting platform/bow seat, just aft of the rope locker, is drained by gravity to a thru-hull fitting in the hull side. The hatch drain rails drain to the cockpit sole.

#### **Bow Storage Compartments**

The storage compartments below the port and starboard casting platform/bow seats are drained by gravity to the bilge. The hatch drain rails drain to the cockpit sole.

#### **Forward Below Deck Storage Compartment**

The storage compartment below the cockpit sole, just forward of the pilot house, drains by gravity to the forward bilge. The compartment hatch drain rail is drained by gravity to a thru-hull fitting in the forward bilge below the waterline near the fishbox. The seacock valve on the drain thru-fitting should be open during normal operation.

### 9.4 Bilge Drainage

The bilge pumps are activated both manually by switches in the helm switch panel and by automatic switches near each pump in the bilge. The automatic bilge pump switches remain activated when the battery switches are in the OFF position and the batteries are connected. All bilge pumps pump water out of thru-hull fittings located above the waterline in the hull.

#### Notice:

#### See Electrical Systems for additional information on bilge pump operation.

When the boat is out of the water the bilge can be drained by a garboard drain located in the transom near the bottom of the hull. The plug should be removed whenever the boat is hauled out of the water and installed just prior to launching. It is important to check the drain plug regularly to make sure it is tight.



325 Pilot Aft Fishbox and Baitwell



325 Pilot Aft Bilge Pumps and Automatic Switches



Typical Garboard Drain Plug

by Dougherty .

## Drainage Systems

# **Everglades**<sup>®</sup>

## WARNING

A LOOSE DRAIN PLUG WILL ALLOW SEAWATER TO ENTER THE BILGE AND COULD CAUSE THE BOAT TO FLOOD WITH SEAWATER. IT IS VERY IMPORTANT TO CHECK THE DRAIN PLUG FREQUENTLY TO ENSURE IT IS PROPERLY TIGHTENED.

#### Important:

Any oil spilled in the bilge must be thoroughly removed and properly disposed of before operating the bilge pump. The discharge of oil from the bilge is illegal and subject to a fine.



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 \$10,000.

### 9.5 Head Compartment Drainage Shower and Head Compartment Drain Sump

The sump system is equipped with a strainer, centrifugal pump and automatic switch. It is activated whenever the House battery switch is ON. Labeled test discs on the automatic switch provide a means to manually activate the sump pump. Always make sure the House battery switch is activated before using the shower.

After showering, it is important to let the water flow for a period of time to flush the drainage system of soap residue. Make sure to inspect the sump system regularly and keep the sump components and sump strainer clean.

The sump strainer and automatic switch are located below a hinged hatch in the head compartment sole. The pump is located below an access hatch near the sump. Raise the hatch to access the sump for cleaning or to manually activate the pump. Manual activation is accomplished by



Typical Shower and Head Compartment Sump Pump System



Air Conditioner Condensation Pan

simultaneously holding your fingers on the two recessed discs on the side of the automatic switch until the pump is activated.

#### **Head Compartment Sink**

The sink is drained by gravity to a thru-hull fitting in the hull side.

### **Air Conditioner Drain**

The air conditioner condensation pan is drained by gravity through a hose attached to the condensation pan that drains the water to the forward bilge.



### **Drainage Systems**

# **Everglades**<sup>®</sup>

### 9.6 Drainage System Maintenance

It is essential that the following items be done periodically to maintain proper drainage of your boat:

- Clean the cockpit drain rails with a hose to remove debris that can block water drainage.
- Clean the bilge pump strainers of debris and check the bilge for foreign material that can cause the automatic switches to malfunction.
- Frequently test the automatic bilge pump switches for proper operation. This is accomplished by simultaneously holding your fingers on the two recessed discs on the side of the switch until the pump is activated. You can also use a garden hose to flood the bilge until the water level is high enough to activate the pump.
- Clean and inspect the head compartment and shower drain sump system. Remove accumulated debris and flush with fresh water. Frequently test the automatic pump switch for proper operation.
- Flush the air conditioner condensation pan drain with fresh water at least once each season to remove mold and debris. This is particularly important because mold tends to accumulate in condensation pan drain and, if it is not cleaned regularly, the drain can clog causing condensate water to overflow into the head compartment when the air conditioner is operating.
- Flush all gravity drains with fresh water to keep them clean and free flowing.
- Clean fishbox pump out strainers after each use to keep them clean and free flowing.



Automatic Switch Test Discs

- Clean and flush the fishboxes, coolers and storage boxes with soap or a bilge cleaner and fresh water after each use to keep them clean and fresh.
- Operate all seacock valves at least once a month to keep them operating properly.

Note: All drains and pumps must be properly winterized before winter lay-up.



by Dougherty

THIS PAGE WAS LEFT BLANK INTENTIONALLY

## **VENTILATION SYSTEM**

#### 10.1 Pilot House Ventilation Windshield

The windshield can be lowered to provide ventilation at the helm and improve visibility. The windshield is raised and lowered by hydraulic cylinders activated by an electric hydraulic pump in the head compartment. The system is controlled by the Windshield switch in the hardtop switch panel. To lower the windshield, press and hold the switch in the down position until the windshield is lowered to the desired position, then release the switch. To close the windshield, hold the switch in the up position until the windshield is completely closed. Always release the switch immediately when windshield reaches the full down or closed position.

#### Notice

A micro switch incorporated in the windshield system prevents the windshield wiper from operating when the windshield is lowered. The windshield must be in the full up position to disengage the micro switch and operate the wipers.

#### **Rear Window**

The rear window is hinged and supported in the open position by two gas charged springs. It is secured in the closed position by two twist action cam latches on the inside of the window. There is a sliding lock on each cam latch lever to prevent them from opening accidentally or from the outside of the pilot house.



Opening Rear Window



Opening Windshield in the Closed Position



Hydraulic Pump System for Windshield In Head Compartment

To open the window, release the lock and rotate each cam latch lever to the open position. Push the bottom of window out. The gas charged springs will help raise the window and hold it in the open position. To close the window, pull the cam latch handles to overcome the gas springs and close the window. Secure in the closed position with the two cam latches and slide locks.

The cam latches can secure the window in two positions, the vent position or fully closed. The

by Dougherty

## **Ventilation System**

# **Everglades**<sup>®</sup>

window is secured in the vent position by opening the window slightly until the cam latch levers align with the notch in the window frame just before the fully closed, watertight position. With the cam latches secured in this position, the window will be open just enough to let air circulate into the pilot house. Always secure the rear window in the water tight position when leaving the boat unattended.

### **10.2 Head Compartment Ventilation** Head Compartment Door & Vents

An opening panel and vents in the door provide ventilation to the head compartment. The door itself is held in the open position by an automatic magnetic latch. Make sure the door is fully latched in the closed position before operating the boat above idle speed.

The door is equipped with an opening panel that provides ventilation to the head compartment. The panel is held in the open or closed position by two twist action locks. The locks should be adjusted so they are tight enough to seal the panel in the closed position and hold the panel securely when it is open.

Always make sure the panel is closed and secured with the twist locks whenever the boat is underway. Sea spray could enter the head compartment through the open panel and damage equipment or items stowed there.



Rear Window Cam Lever Latches



Head Compartment Door Vent Panel Open



Magnetic Door Latch



Head Compartment Door Vent Panel Closed Cabin Door Vent Twist Action Latches



### Ventilation System

# **Everglades**<sup>®</sup>

#### **Port Window**

An opening port window is located in the side of the head compartment. The port window is equipped with a screen and secured in the closed position by three twist action locks. The locks should be adjusted so they are tight enough to seal the window in the closed position, but not so tight that they break the plastic.

Always make sure the window is closed and secured with the twist locks whenever the boat is underway. Sea spray could enter the head compartment through the open window and damage equipment or items stowed there.

### 10.3 Bilge Ventilation

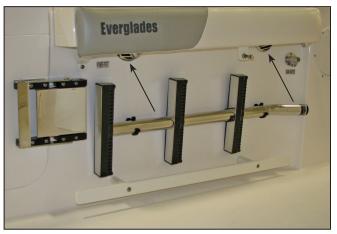
Ventilation to the bilge is provided by vents located on each side of the cockpit liner below the gunnels. The vents provide air circulation in the bilge compartment to reduce odors and mildew. They also provide ventilation for the gases that could be released by the batteries during charging. Make sure to keep these vents clear and unobstructed.

### 10.4 Maintenance

- Periodically lubricate all hinges and latch assemblies with a light oil.
- Frequently inspect and adjust the twist locks for the head compartment door panel and port window to make sure they are in good condition and adjusted properly. Adjust or replace locks as required.
- Keep the windshield and door slide tracks clean. Periodically coating the tracks with silicone spray will reduce friction and keep the doors and windshield sliding smoothly.
- Periodically clean and coat gasket materials with silicone to help keep them pliable.



Port Window and Twist Action Locks



Bilge Vents



Bilge Vent Behind Cockpit Bolster

THIS PAGE WAS LEFT BLANK INTENTIONALLY

# **EXTERIOR EQUIPMENT**

### 11.1 Deck Rails and Deck Hardware

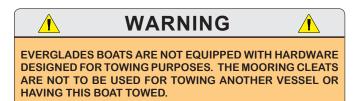
The rail system and hardware fittings have been selected and installed to perform specific functions. Hand rails are installed to provide a handhold in certain areas of the boat. You should make sure you keep at least one hand on the handholds as you move about the boat.

Fenders or mooring lines should be secured to the cleats and not to rails or stanchions. The cleats on your boat are retractable and flush with the deck when not in use. To use the cleats, pull up on the center of the cleat until it locks in the mooring position. Be sure a clear lead exists when running dock lines or anchor lines. A line inadvertently run around a stanchion or over the rail could cause damage.

An optional stainless steel bow cleat that is also a lifting ring is available. It is flush with the deck when it is not in use. To use the cleat, pull up on the center of the cleat until it locks in the mooring position. A stainless steel threaded rod connects the lifting ring/cleat to the bow eye, transferring the lifting load to the hull. If your boat is equipped with this option, the bow lift ring/cleat and rod hardware should be checked at least once a year to make sure it is sound and tight.

#### **Important:**

All fittings must be periodically inspected for loose fit or wear and damage. Any problems should be corrected immediately.





295 Pilot Anchor Roller Assembly, Windlass and Rope Locker

### 11.2 295 Pilot Rope Locker and Windlass Anchor Rope Locker

The rope locker is in the bow of the boat and accessed through a hatch in the deck. The rope locker is designed for anchor line storage only and there is an eye fitting to secure the bitter end of the line. Do not store additional anchors or any heavy object in the rope locker. Heavy objects like weights for floating markers will bounce and damage the hull if they are stored in the rope locker. They will also interfere with the operation of the windlass. Always store and secure additional anchors and weights in a storage compartment in the cockpit, as far aft as possible.

The roper locker is drained by a thru-hull fitting in the hull side near the bottom of the locker. It is very important to check the drain frequently to make sure it is clean and free flowing.

Periodically remove the anchor line from the rope locker, rinse it with fresh water and allow it to dry in the sun. Cleaning the anchor line regularly will reduce odors in the rope locker and increase the life of the line.

The line should also be inspected for abrasions or signs of deterioration. Replace the line if it

# **Everglades**<sup>®</sup>

shows any sign of damage or deterioration. It is important to replace the anchor line with a new line of the type recommended or supplied by the windlass manufacturer.

#### Windlass and Bow Roller

The windlass is mounted to the deck near the rope locker. The anchor is stored on the bow pulpit/ roller assembly and is raised and lowered by the windlass. The anchor line is stored in the rope locker and routed out through the windlass to the anchor chain.

The anchor is lowered by releasing the anchor from the chain binder on the roller assembly and operating a "DOWN" control at the helm. After the anchor is set, the windlass must not be left to take the entire force from the anchor line. Boats lying to their anchor in a high swell or heavy weather conditions will snub on the line. This can cause slippage or apply excessive loads to the windlass. The line should be made fast to a bow cleat to relieve the load on the windlass.

The anchor is hauled in by releasing the line from the bow cleat and operating the "UP" control at the helm. Once the anchor is retrieved, secure the anchor to the chain binder to prevent it from being accidentally released. The chain binder is designed to automatically latch to a vertical link in the anchor chain when the anchor is hauled in. To release the binder, pull the anchor chain in slightly to relieve the tension on the binder, then rotate the binder up to the full release position. To secure the anchor in the up and stored position, rotate the binder down until it rides on the anchor chain. The binder will automatically secure itself to the last vertical link in the anchor chain as the anchor is set in the pulpit and roller. Before getting underway after hauling the anchor, always make sure the binder is completely set on the anchor chain link and the rope locker hatch is closed and latched.

A windlass must be used with care. It is extremely important that you read the owner's manual and become familiar with the safety instructions and proper operation of the windlass before using it with your boat. Always ensure that limbs, fingers, hair and clothing are kept clear of the windlass and anchor line during operation.

A partially lowered and loose anchor can cause considerable damage to the hull. Do not use a windlass as a sole means of securing an anchor in the bow pulpit. Always secure the anchor line with the chain binder before operating your boat.



Anchor Chain Binder



325 Pilot Built In Bow Roller

## 11.3 325 Pilot **Rope Locker and Windlass**

#### **Bow Roller**

The bow roller is built into the hull and is equipped with hardware that allows the anchor to be operated and stored at the roller. The roller assembly, anchor line and chain binder are concealed below a hatch in the deck. The anchor line is stored in the rope locker and routed out the windlass, through the roller and connected to the anchor chain. A chain binder is provided to secure the anchor. Always make sure the anchor is properly secured by the chain binder when it is in the stored position on the roller.



The chain binder is accessed by opening the hatch and is designed to be attached to a link in the anchor chain when the anchor is hauled in. To release the binder, pull the anchor chain in slightly to relieve the tension on the binder, then release the binder from the chain and lay it along side the windlass. To secure the anchor in the up and stored position, haul the anchor in and fully seat it in the bow roller. Attach the chain binder as tight as possible to a link on the anchor chain. Before getting underway after hauling the anchor, always make sure the binder is attached to the anchor chain and the hatch is closed and latched.

#### Anchor and Rope Locker

The anchor rope locker, windlass and raw water washdown hose are concealed in a recess below a hatch in the deck. A gas spring supports the hatch in the open position. A flush, twist lock latch secures the hatch in the closed position. There is a large red dot in the handle that indicates that the latch is in the open position and the hatch is not secure. Always make sure the hatch is closed with the latch in the secured position before operating the boat above idle speed.

The rope locker and anchor line is accessed through an opening next to the windlass. The anchor line is always stored in the rope locker and there is an eye fitting to secure the bitter end of the anchor line.

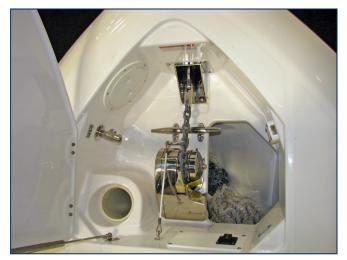
The anchor/windlass recess is equipped with spigot plumbed with raw water to clean the anchor, line, windlass and hardware. After the anchor is hauled in and secured with the chain binder, the anchor, line, windlass and all hardware should be rinsed clean using a coiled washdown hose attached to the spigot. Make sure the Raw Water switch is on before using the washdown hose.

The rope locker is designed for the anchor line and not for storing anchors or additional anchor lines. Do not store anchors or any heavy objects in the locker. Anchors and weights for floating markers will bounce and damage the hull or rope locker if they are stored there. They will also interfere with the operation of the windlass. Always store and secure additional anchors and weights in a storage compartment in the cockpit, as far aft as possible.

The rope locker is drained by a fitting in the hull side near the bottom of the locker. It is very important to check the drain frequently to make sure it is clean and free flowing.



325 Pilot Chain Binder and Washdown Faucet



325 Pilot Anchor Rope/Windlass Compartment



Windlass Switch in Windlass Compartment

**Everglades**<sup>®</sup>

by Dougherty .

# **Everglades**<sup>®</sup>

Periodically remove the anchor line from the rope locker, rinse it with fresh water and allow it to dry in the sun. Cleaning the anchor line regularly will reduce odors in the rope locker and increase the life of the line.

The line should also be inspected for abrasions or signs of deterioration. Replace the line if it shows any sign of damage or deterioration. It is important to replace the anchor line with a new line of the type recommended or supplied by the windlass manufacturer.

#### Windlass

The windlass is mounted in the compartment below the hatch in the deck. The anchor is stored on the roller and is raised and lowered by the windlass. The anchor line is stored in the rope locker and routed out through the windlass to the anchor chain.

The anchor is lowered by releasing the anchor chain from the chain binder and operating a "DOWN" control at the helm or the switch near the windlass. The windlass control switches are protected by circuit breakers in the head compartment breaker panel and near the batteries.

After the anchor is set, the windlass must not be left to take the entire force from the anchor line. Boats lying to their anchor in a high swell or heavy weather conditions will snub on the line. This can cause slippage or apply excessive loads to the windlass. The line should be made fast to the cleat provided to relieve the load on the windlass.

The anchor is hauled in by releasing the line from the cleat and operating the "UP" control at the helm or the switch near the windlass. Always start the engines before hauling the anchor and motor up to the anchor as the line is retrieved to relieve the load on the windlass. Once the anchor is retrieved, independently secure the anchor with the chain binder to prevent it from being accidentally released. This is especially important while the boat is under way.

The windlass manufacturer provides an owner's manual with its product. It is extremely important that you read the manual and become familiar with the proper care and operation of the windlass. Refer to the Operation chapter for tips on anchoring your boat.

### WARNING

A WINDLASS MUST BE USED WITH CARE. IT IS EXTREMELY IMPORTANT THAT YOU READ THE OWNER'S MANUAL AND BECOME FAMILIAR WITH THE SAFETY INSTRUCTIONS AND PROPER OPERATION OF THE WINDLASS BEFORE USING IT WITH YOUR BOAT. ALWAYS ENSURE THAT LIMBS, FINGERS, HAIR AND CLOTHING ARE KEPT CLEAR OF THE WINDLASS AND ANCHOR LINE DURING OPERATION.

## WARNING

A PARTIALLY LOWERED AND LOOSE ANCHOR CAN CAUSE CONSIDERABLE DAMAGE TO THE HULL. DO NOT USE A WINDLASS AS A SOLE MEANS OF SECURING AN ANCHOR IN THE BOW PULPIT. ALWAYS SECURE THE ANCHOR TO A CHAIN BINDER BEFORE OPERATING YOUR BOAT.

### *11.4 Hull* Towing Bow Eye (Optional)

The heavy duty towing package includes a heavy duty bow eye. The eye includes a welded stainless steel plate with internal bow reinforcement and backing plates that distribute force on the bow eye to a larger area of the hull than with the standard bow eye. This option should always be selected if you intend to tow the boat behind a larger vessel.



Typical Heavy Duty Towing Bow Eye



# **Everglades**<sup>®</sup>

### DANGER

TOWING A BOAT BEHIND A LARGER VESSEL REQUIRES SPECIAL KNOWLEDGE AND SKILL. THE USE OF TOW LINES OR HARDWARE NOT INTENDED FOR TOWING OR RATED FOR THE FORCES EXERTED ON EQUIPMENT DURING THE TOW IS EXTREMELY DANGEROUS AND CAN CAUSE SEVERE INJURY OR DEATH TO PASSENGERS IF THAT EQUIPMENT FAILS. NEVER TOW THE BOAT BEHIND A LARGER VESSEL USING THE STANDARD BOW EYE OR WITH A TOW LINE, HARNESS OR OTHER EQUIPMENT NOT RATED FOR THE EXPECTED LOADS EXPERIENCED DURING THE TOW. IF YOU ARE NOT EXPERIENCED IN TOWING A VESSEL, CONSULT WITH AN OPERATOR AND A MARINE FACILITY EXPERIENCED IN TOWING VESSELS FOR HELP SELECTING PROPER EQUIPMENT AND FOR TRAINING.



295 Pilot Stern Boarding Ladder



BOATS THAT ARE TOWED BEHIND LARGER VESSELS REQUIRE SPECIAL MAINTENANCE. ATTENTION TO THE ALUMINUM AND STAINLESS STEEL HARDWARE IS ESSENTIAL. THE SALT SPRAY, SALTY STEAM AND CHEMICALS IN EXHAUST GASES ARE PARTICULARLY CORROSIVE AND WILL DAMAGE THE SURFACE OF STAINLESS HARDWARE OR ANODIZED AND POWDER COATED ALUMINUM. IT IS IMPERATIVE THAT THE BOAT AND HARDWARE ARE CLEANED THOROUGHLY AT THE COMPLETION OF EACH TRIP OR AT THE END OF EACH DAY ON LONG CRUISES TO REDUCE ACCELERATED DETERIORATION AND PREMATURE CORROSION TO ALUMINUM, STAINLESS STEEL AND OTHER COMPONENTS ON THE BOAT.

#### **Engine Mounting System and Swim Platform**

Your Everglades is equipped with an engine mounting system and swim platform that are integrated into the hull and stringer system. The engine mounting system is designed to distribute the stresses of engine weight and thrust throughout the entire hull.

The engine hoses and cables or the transom gel coat can be damaged by tilting the engines to the full up position with the engines turned to the wrong position. You should monitor the engines as they tilt to determine best full tilt engine position for your boat.

#### Stern Boarding Ladder 295 Pilot Boarding Ladder

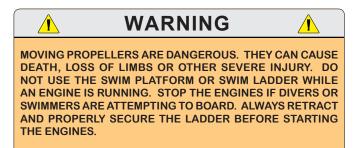
The telescopic boarding ladder is recessed into the starboard swim platform. To use the ladder, release the snap on the retaining strap, pull the ladder out of the recess and rotate it to the down position. The ladder must be retracted and secured in the recess with the strap before starting the engines.



325 Pilot Stern Boarding Ladder with Folding Steps

#### **325 Pilot Boarding Ladder**

The telescopic boarding ladder is recessed into the starboard swim transom. To use the ladder, release the retaining pin, pull the ladder out of the recess and rotate it to the down position. Unfold the steps. The ladder must be retracted and secured in the recess with the pin before starting the engines.



# **Everglades**<sup>®</sup>

#### **Trim Tabs**

The trim tabs are located on the transom below the swim platform. The trim tabs are an important part of the control systems. Please refer to the Helm Control Systems chapter for detailed information on the trim tabs.

### 11.5 Cockpit Features All Models General

Most hatches and doors in the cockpit are secured with special cam action, draw or automatic "push to close" latches. Gas charged springs are used on most hatches that help raise the hatches and hold them in the open position.

Some large hatches in the cockpit sole are secured with special flush mounted, twist lock latches with handles that store flush in the latch in the open or latched position. There is a large red dot in the handle that indicates that the latch is in the open position and the hatch is not secure. Always make sure that all hatches are closed with the latches in the secured position before operating the boat above idle speed.

Round access plates located in the sides of the cockpit liner provide access to the fill hoses and fittings. Other access plates in the cockpit sole provide accesses to fuel supply lines, fuel gauge sender and the fuel fill and vent hose connections on the fuel tank.



### WARNING

IN CERTAIN CONDITIONS, OPEN EXTERIOR DOORS AND HATCHES THAT ARE NOT SECURED PROPERLY CAN SLAM CLOSED UNEXPECTEDLY AND CAUSE INJURY TO PASSENGERS OR DAMAGE TO THE BOAT. SOME DOORS AND HATCHES ARE EQUIPPED WITH SPECIAL FASTENERS, HATCH LIFTERS, MAGNETIC LATCHES OR SNAPS AND STRAPS TO SECURE THEM IN THE OPEN POSITION. ALWAYS MAKE SURE THAT THESE HATCHES AND DOORS ARE PROPERLY SECURED WHENEVER THEY ARE IN THE OPEN POSITION.

### **Transom Door**

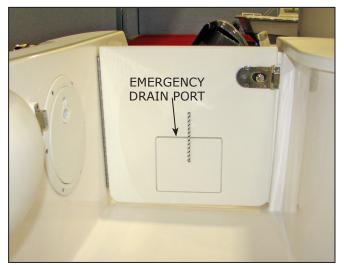
A transom door is incorporated into the rear of the cockpit. It is secured by a special latch mounted on the inboard side of the door. A magnet in the latch automatically pulls the dead bolt into the receiver when the door is closed. A rotating safety knob secures the latch in the closed position. When the transom door is closed, make sure the



Twist Latch Unlatched Red Dot Showing



Twist Latch latched Red Dot is Not Showing



325 Pilot Transom Door and Emergency Drain Port



Transom Door Latch and Safety Knob

latch is completely closed and that the safety knob is fully rotated to the locked position to prevent the latch from opening accidentally.

The transom door is equipped with a large emergency drain port that automatically opens to

by Dougherty

# **Everglades**<sup>®</sup>

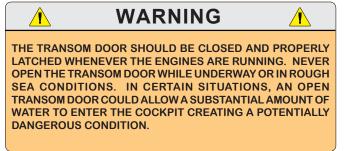
provide additional drainage if the cockpit should become flooded by a large wave when the transom door is closed. The drain port is designed to open only from water pressure inside the cockpit. The transom door should only be opened when the boat is not underway. The door must be latched in the full CLOSED position whenever the boat is underway. Never leave the transom door unlatched.

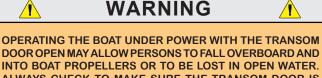
#### Notice:

Periodically inspect the transom door fittings for wear, damage or loose fit. Any problems should be inspected and corrected immediately.



Typical Rod Racks





INTO BOAT PROPELLERS OR TO BE LOST IN OPEN WATER. ALWAYS CHECK TO MAKE SURE THE TRANSOM DOOR IS PROPERLY CLOSED AND LATCHED BEFORE STARTING THE ENGINES AND NEVER OPERATE THE BOAT UNDER POWER WITH THE TRANSOM DOOR OPEN.

#### **Rod Racks**

There are recessed rod storage racks located below the gunnel on each side of the cockpit. They are equipped with stretch cords to secure the rods to the racks. Always make sure the rods are properly secured in the storage racks with the rod tips forward.

#### **Rod Lockers**

There are rod storage lockers located behind lockable hatches on either side of the cockpit near the bow. The hatches are secured with special locking, flush mounted, "push to close" latches.

The rod racks are equipped with stretch cords to secure the rods. Always make sure the rods are



Typical Rod Locker at Bow



295 Pilot utility door

properly secured to the racks with the rod tips forward. The lockers drain by gravity to the bilge.

by Dougherty.

# **Everglades**<sup>®</sup>

### 11.6 295 Pilot Cockpit Equipment

**utility door and Boarding Ladder (Optional)** A utility door in the port hull side is available as optional equipment. The door provides divers and swimmers easy, unobstructed access to the water and cockpit. It also makes boarding and exiting the boat much easier in many docking situations.

A magnetic latch holds the door in the full open position and a special latch mounted on the inboard side of the door secures it when it is closed. The door latch has a spring loaded safety pin. When the utility door is closed, make sure the latch is completely closed and that the safety pin is snapped into place to prevent the latch from opening accidentally.

The utility door should only be opened when the boat is not in motion with the engines shutdown. The door must be secured in either the full "OPEN" position with the magnetic latch or in the full "CLOSED" position with the main latch and safety pin. Never leave the utility door unlatched.

#### Notice:

Periodically inspect the utility door hinges and hardware for wear, damage or loose fit. Any problems found should be corrected immediately.



### WARNING

∕♪

THE UTILITY DOOR SHOULD BE CLOSED AND PROPERLY LATCHED WHENEVER THE ENGINES ARE RUNNING. NEVER OPEN THE UTILITY DOOR WHILE UNDERWAY OR IN ROUGH SEA CONDITIONS. IN CERTAIN SITUATIONS, AN OPEN UTILITY DOOR COULD ALLOW A SUBSTANTIAL AMOUNT OF WATER TO ENTER THE COCKPIT CREATING A POTENTIALLY DANGEROUS CONDITION.



OPERATING THE BOAT UNDER POWER WITH THE UTILITY DOOR OPEN MAY ALLOW PERSONS TO FALL OVERBOARD AND INTO BOAT PROPELLERS OR TO BE LOST IN OPEN WATER. ALWAYS CHECK TO MAKE SURE THE UTILITY DOOR IS PROPERLY CLOSED AND LATCHED BEFORE STARTING THE ENGINES. NEVER OPERATE THE BOAT UNDER POWER WITH THE DOOR OPEN.



295 Pilot utility door Latch and Safety Pin



295 Pilot Dive Ladder Bracket and Release Lever

### **Utility Door Boarding Ladder**

The boarding ladder is mounted to special brackets at the rear of the cockpit, just forward of the engines, when it is in the stored position. To use the ladder, remove it from the storage clips and slide the studs into the special bracket on the hull side just below the door. The ladder floats and is secured in the ladder bracket by a spring loaded latch that prevents the ladder from floating off the bracket. To remove the ladder, push up on the release lever on the side of the ladder bracket to release the latch, then slide the ladder up and off the bracket. To prevent damage to the ladder or hull side, the ladder must be removed from the bracket and properly secured in the cockpit storage clips before starting the engines.



# **Everglades**<sup>®</sup>

WARNING

MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS OR OTHER SEVERE INJURY. DO NOT USE THE UTILITY DOOR OR LADDER WHILE THE ENGINES ARE RUNNING. STOP THE ENGINES IF DIVERS OR SWIMMERS ARE ATTEMPTING TO BOARD. ALWAYS PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINES.

#### **Stern Baitwell**

Λ

The stern baitwell is in the port rear side of the cockpit. The baitwell is equipped with a Plexiglas hatch with a "push to close" latch. It is equipped with a light, built in overflow and recirculation pump. It is drained by gravity to a thru-hull fitting in the hull. The baitwell is supplied seawater by a raw water pump located in the stern bilge. Another pump can be activated by a switch in the helm panel to recirculate and aerate the water in the baitwell. The overflow built into the side of the baitwell automatically controls the water level. The baitwell should be drained and rinsed clean with fresh water after each use. Refer to the Raw Water System and Drainage Systems chapters for more information on the operation of the baitwell.

#### **Aft below Deck Fishbox**

An insulated fishbox is located below the aft cockpit sole. The hatch is equipped with a gas charged spring that holds the hatch in the open position. A flush, twist lock latch secures the hatch in the closed position. There is a large red dot in the handle that indicates that the latch is in the open position and the hatch is not secure. Always make sure the hatch is closed with the latch in the secured position before operating the boat above idle speed.

The fishbox is drained by a centrifugal pump activated by a switch in the helm switch panel. Be sure to monitor the water level in the fishbox and turn the pump off as soon as pumping is complete. The pump could be damaged if it is allowed to run dry for extended periods. The fishbox should be pumped out and cleaned after each use. Refer to the Drainage Systems chapter for more information on the fishbox drainage.

#### **Aft Bench Seat**

Your boat is equipped with an aft bench seat. The seat is designed to fold flush against the rear of the cockpit when it is not in use. The seat is secured in the folded position by a magnetically assisted dead bolt latch.



295 Pilot Stern Baitwell



295 Pilot Aft Below Deck Fishbox



295 Pilot Aft Bench Seat Folded in Stored Position

by Dougherty .

# **Everglades**<sup>®</sup>

To use the seat, release the latch then pull the top of the seat toward the cockpit using the top handle. The bottom of the seat slides in a track and two side supports move out with the seat as it folds out. The seat automatically locks into the seating position when the cushion reaches the full down position.

To store the seat, pull the seat out slightly as you raise the front of the seat with the handle. The rear supports will release and slide down in the track as the seat and side supports fold into the recess. Fold the seat in until it is flush with the recess and align the latch dead bolt with the receiver. The magnet in the latch should pull the dead bolt into the receiver. Make sure the dead bolt is fully engaged in the receiver, then rotate the safety knob to the locked position to prevent the latch from opening accidentally.

#### **Systems Compartment Access**

The aft seat assembly is also the access hatch for the systems compartment in the stern. The seat recess is hinged at the top and secured in the down position by two twist lock latches. Two gas springs help lift the seat/hatch assembly and hold it in the open and closed positions. To open the hatch, release the latches and pull the handle at the bottom of the assembly. By design, the gas springs hold the hatch firmly in the closed position and it will take a considerable amount of force to open it. Once hatch is partially open, the force of the gas springs will begin to lift the hatch to the full open position. Push down firmly on the front of the hatch to close it. Secure the hatch in the closed position with the twist latches.

The hatch provides access to the batteries, battery switches, pumps, strainers, circuit breakers and other equipment in the stern bilge. The aft fishbox pump, stern bilge pump 2, baitwell supply pump, fresh water and raw water pumps, fuse panels and battery charger are among the equipment in this compartment.

#### **Bow Seats and Storage Compartments**

There are 2 storage compartments located in the bow below the seats that are secured with lockable "push to close" latches. Optional bow seat cushions are secured to the hatches with snaps and should be removed and stored when the boat is not being used. The compartments drain by gravity to the bilge.



295 Pilot Aft Bench Seat in Sitting Position



295 Pilot Systems Compartment Access



295 Pilot Bow Seats and Storage Compartments Optional Bow Seat Cushions Shown

by Dougherty

# **Everglades**<sup>®</sup>

#### **Forward below Deck Fishbox**

An insulated fishbox is located below the cockpit sole, just forward of the console seats. The hatch is equipped with a gas charged spring that holds it in the open position. Drain rails around the hatch are equipped with drains that are connected to a thru-hull fitting in the hull below the water line. A flush, twist lock latch secures the hatch in the closed position. There is a large red dot in the handle that indicates that the latch is in the open position and the hatch is not secure. Always make sure the hatch is closed with the latch in the secured position before operating the boat above idle speed.

The fishbox is drained by a centrifugal pump activated by a switch in the helm switch panel or manually with a removable drain plug. Be sure to monitor the water level in the fishbox and turn the pump off as soon as pumping is complete. The pump could be damaged if it is allowed to run dry for extended periods. The fishbox should be pumped out and cleaned after each use. Refer to the Drainage Systems chapter for more information on the fishbox drainage.

### 11.7 325 Pilot Cockpit Equipment

**Utility door and Boarding Ladder (Optional)** A utility door in the port hull side is available as optional equipment. The door provides divers and swimmers easy, unobstructed access to the water and cockpit. It also makes boarding and exiting the boat much easier in many docking situations.

A friction latch holds the door in the full open position and a special latch mounted on the inboard side of the door secures it when it is closed. The door latch has a spring loaded safety pin. When the utility door is closed, make sure the latch is completely closed and that the safety pin is snapped into place to prevent the latch from opening accidentally.

The utility door should only be opened when the boat is not in motion with the engines shutdown. The door must be secured in either the full "OPEN" position with the friction latch or in the full "CLOSED" position with the latch and safety pin. Never leave the utility door unlatched.



295 Pilot Forward Fishbox



325 Pilot Utility Door



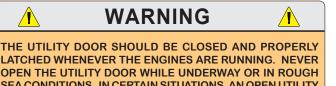
325 Pilot Utility Door Latch and Safety Pin

by Dougherty

# **Everglades**<sup>®</sup>

#### Notice:

Periodically inspect the utility door hinges and hardware for wear, damage or loose fit. Any problems found should be corrected immediately.



LATCHED WHENEVER THE ENGINES ARE RUNNING. NEVER OPEN THE UTILITY DOOR WHILE UNDERWAY OR IN ROUGH SEA CONDITIONS. IN CERTAIN SITUATIONS, AN OPEN UTILITY DOOR COULD ALLOW A SUBSTANTIAL AMOUNT OF WATER TO ENTER THE COCKPIT CREATING A POTENTIALLY DANGEROUS CONDITION.

**OPERATING THE BOAT UNDER POWER WITH THE UTILITY** DOOR OPEN MAY ALLOW PERSONS TO FALL OVERBOARD AND INTO BOAT PROPELLERS OR TO BE LOST IN OPEN WATER. ALWAYS CHECK TO MAKE SURE THE UTILITY DOOR IS PROPERLY CLOSED AND LATCHED BEFORE STARTING THE ENGINES. NEVER OPERATE THE BOAT UNDER POWER WITH THE DOOR OPEN.

#### **Utility door Boarding Ladder**

The boarding ladder is mounted to special brackets in the port side of the cockpit near the utility door when it is in the stored position. To use the ladder, remove it from the storage clips and slide the studs into the special bracket on the hull side just below the door. The ladder floats and is secured in the ladder bracket by a spring loaded latch that prevents the ladder from floating off the bracket. To remove the ladder, push up on the release lever on the side of the ladder bracket to release the latch, then slide the ladder up and off the bracket. To prevent damage to the ladder or hull side, the ladder must be removed from the bracket and properly secured in the cockpit storage clips before starting the engines.



MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS OR OTHER SEVERE INJURY. DO NOT USE THE UTILITY DOOR OR LADDER WHILE THE ENGINES ARE RUNNING. STOP THE ENGINES IF DIVERS OR SWIMMERS ARE ATTEMPTING TO BOARD. ALWAYS PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINES.



325 Pilot Utility door Boarding Ladder in Storage Brackets



325 Pilot Utility Boarding Ladder Bracket and Release Lever



325 Pilot Stern Baitwell

by Dougherty

∕₽

# **Everglades**<sup>®</sup>

#### **Stern Baitwell**

The stern baitwell is in the port rear of the cockpit. The baitwell is equipped with a Plexiglas hatch secured with a "push to close" latch. It is equipped with a light, built in overflow and recirculation pump. It drains by gravity to a thru-hull fitting in the hull. The baitwell is supplied seawater by a raw water pump located in the systems compartment bilge. Another pump can be activated by the Baitwell Recirc switch in the helm panel to recirculate and aerate the water in the baitwell. The overflow built into the side of the baitwell automatically controls the water level. The baitwell should be drained and rinsed clean with fresh water after each use. Refer to the Raw Water System and Drainage Systems chapters for more information on the operation of the baitwell.

#### **Stern Cooler/Fishbox**

An insulated cooler/fishbox is located in the transom at the rear of the cockpit. A flush, "push to close" latch secures the hatch in the closed position and two straps hold the hatch in the open position. The box drains by gravity to a thru-hull fitting in the hull.

#### **Aft Bench Seats**

Your boat is equipped with two aft bench seats. The seats are designed to fold flush against the rear of the cockpit when they are not in use. Each seat is secured in the folded position by a hinged cockpit bolster that becomes the backrest when the seats are in use.

To use the seats, swing the bolster up, then pull the top of the seat toward the cockpit. The bottom of the seat slides in a track and two side supports move out with the seat as it folds out. The seat automatically locks into the seating position when the cushion reaches the full down position.

To store the seat, pull the seat out slightly as you raise the front of the seat. The rear supports will release and slide down in the track as the seat and side supports fold into the recess. Swing the bolster up and fold the seat in until it is flush with the recess. Lower the bolster to secure the seat in the folded position.

#### **Systems Compartment Access**

A hatch in the rear of the cockpit provides access to the pumps, strainers and other equipment in the systems compartment. The stern bilge pumps, raw water supply manifold, baitwell supply pump, fresh water and raw water pumps are among the equipment in this compartment. The hatch is held



325 Pilot Stern Baitwell and Fishbox Aft Bench Seat in Folded Position



325 Pilot Aft Bench Seats in Sitting Position



325 Pilot Systems Compartment Access Hatch

# **Everglades**<sup>®</sup>

open by a gas spring and secured with two rotating compression latches with handles that store flush with the hatch when it is closed.

The latch handle shafts are threaded to pull the pawl against cockpit sole, securing the hatch and compressing the gasket for a more watertight seal. Always make sure the hatch is closed with the latches in the secured position and the handles folded flush before operating the boat above idle speed.

To open the hatch, release the latches by pulling the handles out and rotating them counterclockwise until the latch releases. Then lift the hatch to the full open position. Close the hatch by pushing it to the closed position. Then twist the latch handles clockwise until they are tight enough to hold the hatch firmly to the cockpit sole.

### **Bow Seats and Storage Compartments**

There are 3 storage compartments located in the bow below the seats that drain overboard through fittings in the hull. The side compartment hatches are secured with draw latches and the center compartment hatch near the bow is secured with a lockable "push to close" latch. Each hatch is equipped with a gas charged spring that helps raise the hatch and holds it in the open or closed position.

The optional bow seat and sun lounge cushions are removable and are secured to the hatches with snaps. The cushions should be removed and stored in the head compartment or another safe location out of the weather when the boat is not being used.

#### **Forward Storage Box**

A storage box is located below the cockpit sole, just forward of the pilot house seats. The hatch is equipped with a gas charged hatch lifter that holds the hatch in the open position. Drain rails around the hatch are equipped with drains that are connected to a thru-hull fitting in the hull below the water line. A flush, twist lock latch secures the hatch in the closed position. There is a large red dot in the handle that indicates that the latch is in the open position and the hatch is not secure. Always make sure the hatch is closed with the latch in the secured position before operating the boat above idle speed.

### Casting Deck, Sun Lounge and Table

A retractable table converts the bow area into either a sitting area with a table, a sun lounge or a casting/fishing deck. The table is mounted on an electrically actuated pedestal that is controlled



325 Pilot Systems Compartment Hatch Compression Latch



325 Pilot Forward Fishbox



325 Pilot Table Pedestal Control Switch

by a rocker switch in the side of the cockpit. The switch is a three position momentary switch. The center position is OFF. Press the top of the switch to raise the table, press the bottom of the switch

by Dougherty

# **Everglades**<sup>®</sup>

to lower it. The pedestal will stop immediately when the switch is released.

To use bow area as a casting/fishing deck, lower the table to full down position and make sure it is sitting firmly on the support rails in the recess. Install the optional seat cushions and table filler cushion to use the area as a sun lounge. Remove the filler cushion and raise the table to the full up position to convert the bow area to a sitting or eating area.

To avoid damage to the table and pedestal, always make sure the table is in the full down position and sitting firmly on the support rails whenever the boat is operating above slow speed. This is particularly important when the boat is being run offshore.

# 11.8 Pilot House and Helm Helm

The steering, engine controls, engine instruments and switches for exterior equipment and navigation lights are located on the helm station. An area for flush mounted electronics is located forward of the steering and engine controls. The helm is also equipped with molded in cup holders, storage trays, grab rails and a lockable storage drawer. There is also MP3 and 12 volt accessory plugs on the starboard side. Air conditioning ducts on each side of the helm provide cooling to pilot house whenever the optional air conditioning system is operating.

A large removable hatch in the head compartment provides access to the back of the helm panel for servicing helm equipment and installing electronics or other accessories. There are also fuse panels that provide protection for equipment installed by Everglades or other equipment added by you or your dealer.

The rear of the helm is hinged at the bottom and opens to provide access to service control and steering system components. A heavy duty cable holds the helm in the open position and prevents it from opening too far. Two flush mounted twist lock compression latches secure the helm in the closed position.

The latch handle shafts are threaded to draw the pawl in to secure the helm firmly against the bulkhead. To open the helm station, make sure the engines are not running and hold the helm in the closed position while another person releases the latches inside the head compartment. The latches



325 Pilot Table & Bow Area in Casting Platform Position



325 Pilot Table Up & Bow Area in Sitting Position



Helm Station

are released by pulling the handles out and rotating them counterclockwise until the latch releases. Carefully lower the helm to the full open position.

by Dougherty

# **Everglades**<sup>®</sup>



Helm Access Panel in Head Compartment



Helm Compression Latches in Head Compartment

#### Notice:

The helm is heavy and could open unexpectedly when the last latch is released. This could break the retainer straps or damage the helm. Make sure you hold the helm closed while the latches are released.

Close the helm by pushing it to the closed position while another person secures the latches. The latches are secured by twisting the latch handles clockwise until they are tight enough to hold the helm firmly to the bulkhead.

Always make sure that helm is properly closed and secured with both latches and that the latch handles are folded flush in the recess before operating the boat.



Helm Seat with Bolster in Sitting Position



ALWAYS MAKE SURE THE HELM STATION LATCHES ARE PROPERLY SECURED WITH THE HANDLES FOLDED INTO THE RECESS BEFORE OPERATING OR TRANSPORTING YOUR BOAT. IF THE HELM STATION IS NOT PROPERLY SECURED, IT COULD OPEN UNEXPECTEDLY AND DAMAGE THE BOAT OR CAUSE LOSS OF CONTROL.

UNDER NO CIRCUMSTANCES SHOULD THE HELM BE OPENED WHEN THE ENGINE(S) ARE RUNNING. IN SOME SITUATIONS IT IS POSSIBLE TO ACCIDENTALLY ENGAGE THE ENGINE SHIFT CONTROLS INTO GEAR AND ADVANCE THE THROTTLES AS THE HELM IS OPENING. THIS COULD RESULT IN LOSS OF CONTROL, DAMAGE TO THE BOAT AND INJURY TO PASSENGERS.

#### Seat Base and Helm Seats

The helm and passenger bench seat is equipped with a flip up bolster to provide more room between the seat and the helm. The bolster converts the seat to a leaning post style seat with a backrest, allowing the operator and passenger to sit or stand at the helm. To convert the seat to a leaning post, lift the bolster and push it back above the seat cushion.

by Dougherty

# **Everglades**<sup>®</sup>

#### Cooler

A 94 quart cooler is mounted in a special compartment at the front of the seat base. The cooler compartment door is hinged at the bottom and secured with two spring actuated latches. To slide the cooler out of the compartment, release the two latches and rotate the door down until it lays flat on the pilot house sole. Then slide the cooler out. Make sure the cooler is slid completely into the compartment with the door closed and secured with both latches before operating the boat.

#### Windshield

The pilot house is equipped with a tinted, tempered safety glass windshield. The rear and side door windows are also tempered safety glass.

The windshield slides down to provide ventilation at the helm and improved visibility. The windshield is lowered and raised by hydraulic cylinders on each side of the windshield. The cylinders are activated by a electric hydraulic pump located in the head compartment that is controlled by the Windshield switch in the hardtop switch panel above the helm. You should always monitor the travel of the windshield as it is opened or closed and be ready to release the switch immediately when the windshield reaches the full up or full down position. Refer to the Ventilation chapter for instructions on operating the windshield vent.

The windshield wiper and washer is standard on your Everglades boat. A special lockout mechanism prevents the windshield wiper or washer from activating unless the windshield is in the full up (closed) position. You should always make sure the windshield is in the full up position before activating the windshield wiper.

The windshield wiper should only be used when the windshield is wet. The windshield glass can be scratched by activating the wiper when there is dried salt or dirt on the windshield.

The windshield frame is powder coated aluminum. Powder coated aluminum is very durable and provides excellent resistance to the corrosive effects of saltwater, however, it must be maintained properly and certain precautions must be observed.

The windshield should be washed after each use with soap water to keep it clean and reduce the corrosive effects of the saltwater. Saltwater allowed to remain on the windshield frame will eventually begin to attack the aluminum, usually around fasteners and hardware mounted to the frame.



Helm Seat Bolster up Cooler Compartment in Seat Base



Windshield in Up Position



Windshield Down

Do not drill into or install any hardware to the aluminum frame. Poor maintenance or hardware and snaps mounted to the frame can void the warranty on the powder coated frame.

by Dougherty .

# **Everglades**<sup>®</sup>



Rear Pilot House Window Closed



Rear Pilot House Window Open

Refer to the Routine Maintenance chapter for more information on the care and maintenance of powder coated aluminum.

#### **Rear Window**

The rear window is hinged and supported in the open position by two gas charged springs. It is secured in the closed position by two twist action cam latches on the inside of the window. There is a sliding lock on each cam latch lever to prevent them from opening accidentally or being opened from outside the pilot house. Refer the Ventilation chapter for instructions on operating the rear window.

#### **Pilot House Doors**

Access to the pilot house is provided by a sliding door on each side of the pilot house. The doors are made of fiberglass and slide on a top and bottom track.

A lockable, heavy duty latch secures each door in the closed position. An automatic magnetic latch at the rear of each side of the pilot house holds the doors in the open position while the boat is secured at the dock or at anchor. The magnetic latches are not designed to hold the doors open when the boat is underway.

Special slide bolt latches below the helm seat on each side of the pilot house positively secure the doors in the open position when the boat is underway. Each latch has a spring loaded safety pin that secures the slide bolt in the latched position. You should make sure the slide bolt for each door is completely extended with the safety pin snapped



Heavy Duty Door Latch and Lock



Pilot House Sliding Door



### **Exterior Equipment**

## **Everglades**<sup>®</sup>

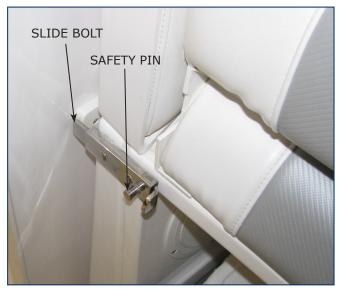
into place to prevent the latch from opening accidentally whenever the boat is underway.

It is very important that the pilot house doors are properly latched in the open or closed position whenever the boat is underway. The doors are heavy and if the doors are not properly latched, they could slide when the boat rocks or hits a wave and pinch someone's fingers between the door and the bulkhead or damage the door.



CLOSED CAUSING SEVERE INJURY TO PASSENGERS AND DAMAGE TO THE PILOT HOUSE IF THEY ARE NOT PROPERLY SECURED WHILE THE BOAT IS UNDERWAY. YOU SHOULD NEVER RELY ON THE MAGNETIC LATCHES TO SECURE THE DOORS WHILE THE BOAT IS MOVING. THE MAGNETS ARE NOT DESIGNED TO HOLD THE DOORS WHILE THE BOAT IS UNDERWAY AND WILL NOT PREVENT THEM FROM SLAMMING CLOSED UNEXPECTEDLY IF THE BOAT ROCKS, HITS A WAVE OR DECELERATES SUDDENLY. ALWAYS MAKE SURE THE DOORS ARE LATCHED WITH THE SLIDE BOLT LATCHES WHILE IN THE OPEN POSITION OR WITH THE MAIN DOOR LATCHES IN THE CLOSED POSITION BEFORE OPERATING THE BOAT.

The pilot house doors are removable. To remove the doors, lift the two retractable guide pins on the bottom of each door. Swing the bottom of the door out far enough to clear the work station. Then slide the door aft and off the track. Remember that the doors are heavy and you need to be prepared to support the weight of the door as it slides off the track. Reverse the process to reinstall the doors.



Slide Bolt Latch and Safety Pin Securing Door in Open Position



Head Compartment Door Vent Panel Open



Magnetic Door Latch



Head Compartment Door Vent Panel Closed

by Dougherty

### **Exterior Equipment**

## **Everglades**<sup>®</sup>

It is important to inspect and properly maintain the slide bolt and door latches. Periodically lubricate the sliding door latches, locks and safety pins with dry Teflon or silicone lubricant to keep them free and working properly. Frequently inspect the latches for damage or wear. Latch components should be immediately replaced if they are damaged or show signs of wear.

### **Head Compartment Door**

The head compartment door on the port side of the pilot house is equipped with vents near the bottom of the door and an opening vent panel. A magnetic latch automatically secures the door in the open position and a lockable, push to close latch secures the door when it is closed.

It is very important that the head compartment door is secured properly in the closed position whenever the boat is operated above idle speed. The head compartment door is heavy and if the door is not closed and properly latched, it could slam shut when the boat rocks and pinch someone's fingers between the door and cabin or damage the door.



THE DOOR IS HEAVY SWINGS EASILY. IF THE DOOR IS LEFT UNLATCHED, IT COULD SLAM UNEXPECTEDLY AS THE BOAT ROCKS, DAMAGING THE DOOR OR CAUSING AN INJURY TO A PASSENGER. ALWAYS MAKE SURE THE DOOR IS PROPERLY SECURED IN THE OPEN OR CLOSED POSITION.



Forward Console Seats



Work Station

### **Forward Console Seats**

Two lounge seats with armrests are located on the front of the pilot house. The seats are equipped with a folding center armrest with drink holders.

### **Work Station**

A work station equipped with a sink, baitwell and tackle storage is located on the aft bulkhead of the pilot house. The sink is plumbed to the fresh and raw water systems and has a removable spray head that reaches to each side of the station or can be used as a shower. The sink is drained by gravity to a thru-hull fitting in the hull side. Grab rails, cup holders, accommodation for hooks,

knives and tools are built into the top of the station. Another stainless steel grab rail is mounted to the pilot house bulkhead above work station.

There are 8 drawers for tackle storage and dunnage. The large doors are equipped with removable tackle trays. "Push to close" latches secure each drawer when they are closed. They latch automatically when the drawers are closed and are lockable.



### **Exterior Equipment**

### Pilot House Hardtop

The standard hardtop consists of a laminated fiberglass. It is equipped with a switch panel, White/Blue LED overhead lighting for the helm and a mounting area for a VHF radio, stereo and the optional air conditioner control panel. The top is designed to accommodate radio antennas, radar antennas, forward and aft spreader lights, navigation lights and rod holders. It could also be equipped with optional outriggers. The spreader lights, windshield wiper/washer, hardtop lights and retractable windshield are controlled by switches in the hardtop switch panel.

The hardtop is not designed to support the additional weight of heavy items like a life raft. Radar and electronics antennas must be mounted to the top between the front and rear bulkheads in the mounting areas provided. Do not mount any antennas or equipment to the areas of the hardtop that overhang the front and rear pilot house bulkheads. The hardtop is not designed to support the weight of accessories in these areas and could be damaged.

The warranty for the pilot house and hardtop will be void if the top is modified in any way or heavy accessories like life rafts are mounted to the top. Additionally, if items like radar antennas, spotlights and other accessories are mounted in the wrong location, the warranty could be void. If you intend to add equipment or make modifications to the hardtop, you should contact Everglades Customer Service to make sure the equipment you would like to add or the intended modification will not void the warranty on the top.



Pilot House & Hardtop

### 11.9 Crow's Nest (Optional)

The Crow's Nest (observation tower) is a powder coated, welded aluminum frame that is bolted to the pilot house hardtop. A removable ladder that attaches to the starboard side of the hardtop provides access to the Crow's Nest.

The ladder is stowed in special brackets in the cockpit sides below the gunnel. Always make sure the ladder is removed from the hardtop and properly secured in the brackets before operating the boat above trolling speeds.

The Crow's Nest is intended to be an observation station only, it does not have controls. Refer to the Operation chapter for information on the safe operation of the boat while someone is riding in the Crow's Nest.

Do not overload the Crow's Nest. It is designed to hold the weight of only one average-sized person. Weight in the Crow's Nest raises the boat's center of gravity. Too much weight could make the boat unstable. THIS PAGE WAS LEFT BLANK INTENTIONALLY

### **INTERIOR EQUIPMENT**

### 12.1 Head Compartment

The head compartment is equipped with a fresh water sink and faucet that converts to a shower by pulling the faucet out of the base. The shower water drains to the sump system where it is pumped overboard. An automatic switch near the pump activates and controls the pump while showering. A hinged grate in the floor provides access to clean and service the sump system.

Daylight and ventilation is provided by an opening port window and an opening vent panel in the cabin door. There is also a 12-volt light in the head compartment that is activated by a switch near the door.

The circuit breakers that protect the 12 volt accessories activated by the helm switch panels are located in a panel on the rear bulkhead. A hatch above the circuit breaker panel provides access to the back of the helm station to service helm components or install electronics. Other hatches in the compartment provide access to the overboard macerator pump, discharge valves and other water system valves. The windshield hydraulic system is located behind a hatch in the rear head compartment bulkhead, just above the floor.

A storage compartment is located below the sink. If your boat is equipped with the optional 12 volt DC air conditioning system, it will be located in this compartment. You should not use this compartment for storage when the air conditioning system is installed. Items stored in the compartment can bounce and damage air conditioner components or restrict the air flow to the air handler and vents.

The forward bilge pump is located below the floor in the head compartment and accessed through a removable access plate. The access plate is threaded and must be rotated counterclockwise to remove the panel to access the pump.



Head Compartment, Sink and Storage Compartment



Head Sink Faucet and Shower



Windshield Hydraulic System

by Dougherty .

### 12.2 *Marine Head System* Marine Toilet

A manual marine toilet is standard equipment. Flush water is supplied by the fresh water system to reduce odor in the holding tank and head system. Always make sure the fresh water system is activated before using the head.

Before using, depress the foot peddle on the side of the toilet to wet the inside of the bowl. After use, press the foot peddle all the way down to flush and rinse the bowl. The waste is discharged to holding tank below the toilet. Once the waste is discharged, the toilet should be drained dry by opening the discharge valve part way without activating the fresh water valve. Refer to the toilet manufacturer owner's manual for more information on the operation of the marine head system.

### Holding Tank and Pump Out System

The holding tank is located below the toilet. When the tank is full it must either be pumped out by an approved waste dumping station through the waste deck fitting or pumped overboard by the waste discharge pump, when legal to do so.

A switch panel with a key activated lockout is located on the starboard side of the head compartment. The overboard macerator discharge pump and discharge valve is behind the starboard access panel in the head compartment. The pump discharges holding tank waste to a thru-hull fitting in the hull below the waterline.

To operate the overboard discharge pump, make sure the thru-hull valve in the bilge and the discharge valve near the pump are open. Then turn the key switch in the panel to the ON position. Press and hold the momentary button to activated the pump. When pumping is complete, release the button, close the pump out thru-hull valves and turn the key switch OFF. Remove the key from the switch and store in a safe location.

### Notice:

Monitor the waste level in the holding tank as the overboard discharge pump drains the tank and turn the pump off immediately when draining is complete. The macerator discharge pump will be damaged if it runs dry for more than a couple of seconds.



**Everglades**<sup>®</sup>

Marine Toilet and Holding Tank



Waste System Pump Out Switch Panel



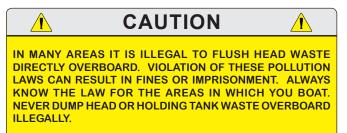
Macerator Overboard Discharge Pump and Valve

by Dougherty

## **Everglades**<sup>®</sup>

#### Notice:

In order to comply with current State, Federal and Coast Guard regulations, the lockout key switch must be off and the key removed whenever the boat is operating in areas in which the discharge of sewage is prohibited.





Air Conditioning System Below Head Compartment Sink

### Maintenance

The head should be cleaned and inspected for leaks regularly.

The holding tank should be pumped out and flushed as needed. Always add chemical to the holding tank to help control odor and to chemically break down the waste. See the head manufacturer owner's manual for additional operating and maintenance information.

To reduce odor in the head compartment, never allow waste to remain in the holding tank for more than one week. Make sure to add fresh water to the holding tank and pump the tank several times to flush it out during pump out operations.

#### Important:

The head system must be properly winterized before winter lay-up. Please refer to the Seasonal Maintenance chapter and the manufacturer owner's manual for winterizing instructions.

### 12.3 Cabin Air Conditioner (Optional)

The air conditioning unit provides cooling to the head compartment and pilot house. The unit operates on 12-volt DC power supplied by the boat batteries and electrical system. The system is designed to only provide cooling and will not function as a heating unit.

The air conditioner is located in the storage compartment below the sink in the head compartment. The unit creates condensation that drips into the pan at the base of the unit. A hose attached to the pan drains the water to the forward bilge where it is pumped overboard by the bilge pump. You should monitor the operation of the forward bilge pump system to make sure it is operating properly whenever the air conditioner is activated. The air conditioner can produce enough condensation to flood the head compartment and forward bilge if it is allowed to run for extended periods without the bilge pump system operating properly.

It is normal for some water to be in the pan whenever the air conditioner has been used. The condensation pan should be checked periodically to make sure it is draining properly. The drain hose and condensation pan should be flushed clean if they become restricted by mold or debris.

The intake line for the seawater pump in the stern bilge is equipped with a sea strainer that must be checked for debris frequently and cleaned as necessary. Refer to the Raw Water System chapter for information on the air conditioning pump and cleaning the sea strainer.

You should also refer to the air conditioner owner's manual for additional operating and maintenance instructions.

#### **NOTICE:**

Air conditioners use surface water as a cooling medium. The boat must be in the water and the raw water supply system must be properly activated prior to use. Operation without proper cooling could cause the air conditioning unit to shut down and may cause system damage. Always check for proper water flow out of the air conditioning pump discharge thru-hull when the air conditioner is operating.

by Dougherty .

### **Air Conditioner Operation**

To operate the system, make sure the thru-hull valve for the air conditioner seawater supply pump is on. The pump, valve and sea strainer are located in the stern bilge. Use the air conditioning control panel located in the pilot house above the helm to activate the system and control the temperature. When activated, the seawater supply pump will start automatically and water should continuously flow from the overboard drain thru-hull.

You should always keep the head compartment and pilot house doors closed when operating the air conditioner. If a cabin door is left open, it could cause the air conditioner unit to run continuously and not cycle enough to defrost the coiling condenser. This could cause the coils to develop enough ice to reduce the unit's ability to cool the boat. Leaving a cabin door open will also significantly reduce the available operating time while operating the air conditioning on battery power.

The air conditioning unit is activated and protected by a fuse in the accessary fuse panel behind the helm. It draws 12-volt DC current from the house battery bank. The DC air conditioning unit draws a significant amount of current (approx 30 amps) while operating. To avoid draining the house batteries when operating the system at dockside, make sure the 120 volt AC battery charging system is connected to shore power and activated to maintain the batteries.

When operating the system away from the dock, the voltage in the house battery bank must be monitored closely to avoid draining the batteries excessively when the engines are not running. If the house batteries are in good condition and no other DC equipment is operating, the DC air conditioner can typically operate approximately 2 to 4 hours before the batteries become drained. If the stereo, interior and/or cockpit lights, electronics or other DC electrical equipment is being used, the operating time available for the air conditioner will be significantly less.

While underway at cruise speed (above 2000 RPM), the engine charging systems will provide enough current to maintain the batteries with the DC air conditioner operating. The engines may not be able to provide enough current at idle or trolling speeds to maintain the batteries with the air conditioner operating, particularly with the stereo and electronics activated. The ability for the engine charging systems to maintain the batteries at slow speeds with the air conditioner operating will vary

**Everglades**<sup>®</sup>

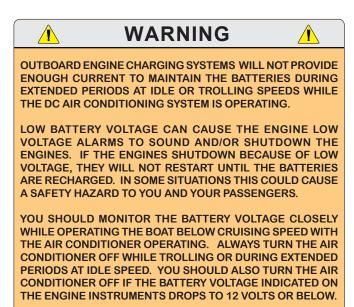


Air Conditioner Control Panel Above Helm in Pilot House

with different engines. You should refer to the engine owner's manual or contact your dealer for information regarding the charging system output at slow speeds and while cruising. This information is important for you to know to ensure the engine charging systems can maintain the batteries when the air conditioner is operating.

#### **Notice:**

Each outboard engine typically requires 15 to 20 amps of electrical current to operate the ignition system, fuel pumps and instruments. This must be taken into consideration when determining total available charging amperage.



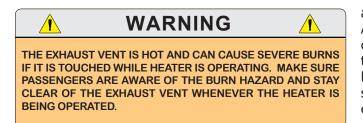
by Dougherty

## **Everglades**<sup>®</sup>

### 12.4 Heating System (Optional)

An optional heating system that warms the pilot house could be installed in your boat. It is located in the instrument locker compartment above the helm. The heater is controlled by a rotary knob in the panel above the helm that is activated and protected by a fuse in the accessary fuse panel.

The unit operates on diesel fuel from a dedicated fuel tank located below the seat in the pilot house. Heated air is forced through the heater to the cabin by a 12 volt blower. Combustion air and a portion of the heated air are provided by intake vents on the outside of the hard top. Exhaust gas is routed outside through an exhaust vent.

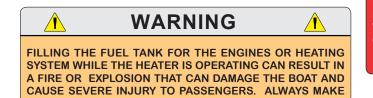


### **Heater Fuel System**

The heater fuel tank is located below the helm seat. It is filled and vented through a fuel fill on the back of the helm seat.

A 12 volt fuel pump activated by the heater control system supplies diesel fuel from the fuel tank to heater. An in-line fuel filter protects fuel system components from debris.

The fuel system should be inspected frequently for leaks and the in-line filter replaced at least once each year.



SURE THE HEATER IS COMPLETELY SHUTDOWN BEFORE

### **Heater Operation**

Before switching on the unit, make sure the house 12 volt system is activated and that the exhaust vent is clear. Then rotate the heater control switch clockwise to the ON position and select the desired temperature. The heater control system will automatically ignite fuel in the combustion chamber and cycle to maintain the temperature inside the pilot house at the selected temperature.

To increase the temperature, rotate the control knob clockwise. To reduce the temperature rotate the knob counterclockwise. The heater is turned off by rotating the control knob counterclockwise to the OFF position.

To avoid overheating and damage to the heater, always use the control knob to turn off the heater. Allow the blower to operate and cool the heater combustion chamber until the heater control system shuts the blower off. Never prematurely end heater operation by turning off the house battery switch while the heater is operating, except in an emergency.

If the heater is not used for extended periods, 30 days or more, the fuel in the heater fuel system can become stale and degraded. Stale fuel can damage the fuel system and heater components. Operate the heater unit once a month for at least 30 minutes to refresh the fuel in the line.

Refer to the heater owner's manual for emergency shut down procedures or additional operating and maintenance instructions.



CARBON MONOXIDE IS COLORLESS, ODORLESS AND DANGEROUS. ALL ENGINES, GENERATORS AND FUEL BURNING HEATERS AND APPLIANCES EXHAUST CARBON MONOXIDE (CO). DIRECT AND PROLONGED EXPOSURE TO CO WILL CAUSE BRAIN DAMAGE OR DEATH. SIGNS OF EXPOSURE TO CO INCLUDE NAUSEA, DIZZINESS AND DROWSINESS.

by Dougherty

FUELING THE BOAT.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

### **ROUTINE MAINTENANCE**

### **13.1 Exterior Hull and Deck** Hull Cleaning-Below The Water Line

When the boat is removed from the water, clean the outer bottom surface immediately. Algae, grass, dirt and other marine growth is easier to remove while the hull is still wet. Use a pressure cleaner or a hard bristle brush to clean the surface.

### **Bottom Painting**

If the boat is to be left in saltwater for extended periods, the hull must be protected from marine growth by antifouling paint. Because of variations in water temperature, marine growth and pollution in different regions, a qualified boat yard in your area should be consulted when deciding what bottom paint system to apply to your hull. This is extremely important as pollution and marine growth can damage fiberglass hulls.

Use only standard antifouling paints and fiberglass wax removers and primers recommended by the antifouling paint manufacturer when preparing the hull for bottom paint. Light sanding, just enough to scuff the gel coat or a skip sand primer system can be used to prepare the hull for bottom paint. The use of coatings other than standard antifouling paint or an epoxy barrier coating are not recommended and will void the hull blister warranty.

Do not allow the hull antifouling paint to contact the outboard motors. Most antifouling paints designed for hull bottoms contain copper and can cause severe galvanic corrosion damage to the motors. Always leave at least a 1" barrier between the hull bottom paint and outboard motors.

CAUTION A SANDBLASTING THE HULL BOTTOM WILL DAMAGE THE FIBERGLASS. USE A FIBERGLASS WAX REMOVER AND SAND TO SCUFF THE GELCOAT SURFACE. THE INSTRUCTIONS AND RECOMMENDATIONS OF THE BARRIER COATING AND ANTIFOULING PAINT MANUFACTURERS SHOULD BE FOLLOWED EXACTLY. CAUTION ( BARRIER COATINGS AND BOTTOM PAINT SHOULD BE APPLIED ONLY BY QUALIFIED MARINE PROFESSIONALS IN A BOAT YARD OR DEALERSHIP THAT SPECIALIZES IN THEIR APPLICATION. USE ONLY STANDARD, HIGH QUALITY ANTIFOULING PAINTS AND BARRIER COATINGS FROM NAME

DO NOT ALLOW THE HULL ANTIFOULING PAINT TO CONTACT THE OUTBOARD MOTORS. MOST ANTIFOULING PAINTS DESIGNED FOR HULL BOTTOMS CONTAIN COPPER AND CAN CAUSE SEVERE GALVANIC CORROSION DAMAGE TO THE OUTBOARD DRIVE UNIT. USE ONLY ANTIFOULING PAINT DESIGNED FOR OUTBOARD MOTORS IF APPLYING ANTIFOULING PAINT TO THE ENGINES. ALWAYS LEAVE A ONE INCH BARRIER BETWEEN THE HULL BOTTOM PAINT AND OUTBOARD MOTOR.

**BRAND MANUFACTURES SUCH AS INTERLUX AND PETTIT.** 

Most bottom paints require some maintenance. Proper maintenance is especially important when the boat is in saltwater and not used for extended periods or after dry storage. If the hull bottom has been painted with antifouling paint, contact your dealer or local boat yard for the recommended maintenance procedures.

### Anodes

Sacrificial anodes are installed on the outboard motors, engine brackets and could be installed on the transom and/or trim tabs. The anodes are less noble than copper based alloys, stainless steel and aluminum. They will deteriorate first, protecting the more noble underwater hardware against galvanic corrosion.



Typical Transom Anode



They must be monitored if the boat is to be left in the water. Anodes should be checked monthly and changed when they are 75% of their original size. When replacing the anodes, make sure the contact surfaces are clean, shiny metal and free of paint and corrosion. Never paint over the anode.

Boats stored in saltwater will normally need to have the anodes replaced every 6 months to one year. Anodes requiring replacement more frequently may indicate a stray current problem within the boat or at the slip or marina. Anodes that do not need to be replaced after one year may not be providing the proper protection. Loose or low quality anodes could be the problem. Contact your dealer or Everglades Customer Service for the proper size and type of anodes to be used and the specific installation procedure.

There are 2 anodes on Yamaha engines. There is a large anode on the bottom of the clamp bracket and another anode on the anti-cavitation plate, above the propeller. 325 Pilot boats are equipped with a large anode on the transom that provides additional protection.

### Fiberglass Gel coat

Normal maintenance requires only washing with mild soap and water. A stiff brush can be used on the nonskid areas. Kerosene or commercially prepared products will remove oil and tar which could be a problem on trailered boats. Harsh abrasive and chemical cleaners are not recommended because they can damage or dull the gel coat, reducing its life and making it more susceptible to stains. When the boat is used in saltwater, it should be washed thoroughly with soap and water after each use.

At least once a season, wash and wax all exposed fiberglass surfaces. Use a high quality automotive or boat wax. Follow the procedure recommended by the wax manufacturer. The washing and waxing of your boat will have the same beneficial effects as they have on an automobile finish. The wax will fill minute scratches and pores thus helping to prevent soiling and will extend the life of the gel coat or paint.

After the boat is exposed to the direct sunlight for a period of time, the gel coat or painted surfaces tend to fade, dull or chalk. A heavier buffing is required to bring the finish back to its original luster. For power cleaning use a light cleaner. To clean the boat by hand, use a heavier automotive cleaner. Before cleaning the surfaces, read the instructions given with the cleaner. After cleaning the surfaces, apply wax and polish all fiberglass surfaces except the nonskid areas.

### Avoid the following on gelcoat surfaces:

- Do not use plastic or other nonporous (nonbreathable) materials to cover gelcoat surfaces. Trapped moisture from condensation can cause gelcoat damage. Shrink wrap storage covers must be properly ventilated, including hull sides.
- Do not use abrasives, bleaches, ammonia, acids or harsh detergents. See your dealer for special marine formulations. Harsh abrasive and chemical cleaners are not recommended because they can damage or dull the gelcoat, reducing its life and making it more susceptible to stains.
- NEVER apply wax or buffing compound to a gelcoat surface in direct sunlight.

Chalking, stains and minor scratches can be removed in most cases with careful rubbing and polishing with appropriate compounds or chemicals and is best done by a professional - see your dealer.

If the fiberglass should become damaged and need repair, contact your dealer or Everglades Customer Service for assistance in finding an authorized repair person to make the repairs.



### **Stainless Steel Hardware**

When using the boat in saltwater, the hardware should be washed with soap and water after each use. When your boat is used in a corrosive environment such as saltwater, water with a high sulfur content or polluted water, the stainless steel will periodically develop surface rust stains. This is perfectly normal under these conditions.



## **Everglades**<sup>®</sup>

#### The following guidelines will help keep stainless steel looking good for many years.

- Clean stainless steel frequently (daily in salt or polluted environments) with mild soap and plenty of water. Any cleaner safe for use on glass is usually safe for stainless.
- Remove rust spots (especially around welds) immediately with a brass, silver or chrome cleaner. Irreversible pitting will develop under rust allowed to remain on stainless for any period of time.
- Remove rust stains on gelcoat. See dealer for recommended product.
- Stainless Steel can normally be cleaned and protected by using a high quality boat or automotive wax or a commercial metal cleaner and protectant.

#### Never do the following on Stainless Steel.

- Do not use coarse abrasives like sandpaper or steel wool which may actually cause rusting.
- Do not use acids or bleaches which may etch the naturally occurring protective coating.
- Do not leave stainless steel in contact with iron, steel or other metals which cause contamination leading to rust or corrosion.



### **Anodized Aluminum Surfaces**

Anodized aluminum should be washed periodically with soap and water to keep it clean. If the boat is used in saltwater or polluted water, the aluminum should be washed with soap and water after each use. Saltwater allowed to remain on anodized aluminum will penetrate the anodized coating and attack the aluminum.

Hardtops, bimini tops or T-tops with canvas and/ or fiberglass tops require special attention to the anodized aluminum just below the top. This area is subject to salt build up from salty condensation and sea spray. It is also frequently overlooked when the boat is washed and will not be rinsed by the rain. Consequently, the aluminum just below the top is more likely to become pitted than the exposed aluminum on the structure. Make sure the aluminum in this area is washed frequently with soap and water and rinsed thoroughly. Pay particular attention to places where the top material or lacing contact the frame. Once a month coat the entire frame with a metal protector made for anodized aluminum to protect against pitting and corrosion caused by the harsh effects of saltwater. Do not use automotive or boat wax designed for paint or gel coat on anodized aluminum. The wax can contaminate the aluminum and damage the anodized surface.



ONE DRAWBACK TO METAL PROTECTORS IS THAT THEY CAN MAKE THE METAL SLIPPERY. THEREFORE, THEY SHOULD BE NOT BE USED ON TOWER LADDERS, STEERING WHEELS AND OTHER AREAS WHERE A GOOD GRIP AND SURE FOOTING IS IMPORTANT.

Stains can be removed with a metal polish or fine polishing compound. To minimize corrosion, use only high quality stainless steel fasteners on aluminum fabrications. Isolate the fasteners from the aluminum by using fiber washers and caulking compound or Tef Gel to bed hardware and fasteners mounted to aluminum fabrications. If the anodized coating is badly scratched, it will require special attention and more frequent cleaning to the damaged area. With proper care, anodized aluminum will provide many years of service.

### **Powder Coated Aluminum**

Powder coated aluminum should be washed periodically with soap and water to keep it clean. If the boat is used in saltwater or polluted water, the aluminum should be washed with soap and water after each use. Saltwater allowed to remain on powder coated aluminum will penetrate the coating and attack the aluminum, usually around fasteners and hardware mounted to the aluminum.

Pay special attention to the area just below the top. This area is subject to salt buildup from salty condensation and sea spray. It is also frequently overlooked when the boat is washed and will not be rinsed by the rain. Consequently, the powder coating near fasteners and hardware mounted just below the top is more likely to be attacked by

by Dougherty.



the salt and become corroded than the exposed areas on the structure. Make sure the aluminum in this area is washed frequently with soap and water and rinsed thoroughly. Pay particular attention to places where the top material and lacing contact the frame.

Once a month check the entire frame for damaged powder coating and corrosion around fasteners and hardware. Nicked or badly scratched powder coating can be sanded and touched up with enamel paint. Corrosion will have to be sanded, then touched up with paint. Periodically applying automotive or boat wax to the powder coating with will provide additional protection from the harsh effects of saltwater.

We strongly recommend that you do not drill into or install any hardware to the aluminum frame. Poor maintenance or hardware and snaps mounted to the fabrication can void the warranty on the powder coated frame. If you do install hardware to the frame, the fasteners will require fiber washers and sealing with caulk or Tef Gel to isolate the fastener from the aluminum and reduce damage to the powder coating when the fastener is installed.

Always repair scratches, nicks and corroded areas in powder coating as soon as possible. Corrosion left unaddressed will lift the powder coating allowing moisture to travel between the powder coating and the aluminum causing the corrosion to spread below the coating and damage the aluminum.

If excessive chipping and peeling occurs, it could be an indication of an electrical fault in the boat or aluminum fabrication. You should contact a qualified marine electrician to inspect your boat immediately and correct the problem if you suspect that your boat may have a fault in the aluminum frame. You should also contact your dealer or Everglades Customer Service.

### Notice:

Boats that are towed behind larger vessels require special attention to the aluminum hardware. The salt spray, salty steam and chemicals in exhaust gases are particularly corrosive and will damage the surface of anodized or powder coated aluminum. It is imperative that the boat and the aluminum are cleaned thoroughly at the completion of each trip or at the end of each day on long cruises to reduce accelerated deterioration of the anodizing or powder coating and premature corrosion to the aluminum.

### Notice:

You should contact Everglades Customer Service before making any modifications to aluminum fabrications. Unauthorized modifications can void the warranty.

#### **Chrome Hardware**

Use a good chrome cleaner and polish on all chrome hardware.

### **Acrylic Plastic Glass**

Acrylic glass scratches easily. Never use a dry cloth or glass cleaning solutions on acrylic. Use a soft cloth and mild soap and water for routine cleaning. Solvents and products containing ammonia can permanently damage acrylic plastic glass.

Fine scratches can be removed with a fine automotive clear coat polishing compound. A coat of automotive or boat wax is beneficial to protect the surface.

### Do not use the following on acrylic glass:

Abrasive cleaners	Acetone
Solvents	Alcohol
Cleaners containing ammonia	Glass cleaners

### **Engines and Fuel**

Proper engine maintenance is essential to the proper performance and reliability of your outboard engines. Maintenance schedules and procedures are outlined in your engine owner's manual. They should be followed exactly.

If the boat is used in saltwater, flush the cooling system after each daily use. To flush the systems when the boat is out of the water, follow the procedure outlined in your engine owner's manual.

Proper engine operation requires a good supply of clean, dry fuel. Improper marina fuel storage techniques, limited boat usage, etc. can cause the fuel to become contaminated.

The age of fuel can affect engine performance. Chemical changes occur as the fuel ages that can cause deposits and reduce the octane rating of the fuel. Severely degraded fuel can damage the engine and boat fuel tank and lines. Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month, a fuel additive should be added to protect it from degradation. Your dealer or the engine manufacturer can



## **Everglades**<sup>®</sup>

provide additional information on fuel degradation and fuel stabilizers recommended for your engine.

In many states, most gasoline is blended with ethanol alcohol. Ethanol is a strong solvent and can absorb water during periods of storage. You should refer to the engine operating manual for information regarding alcohol blended fuels and how it affects the operation of your marine engine.

### 13.2 Upholstery, Canvas and Enclosures Vinyl Upholstery

The vinyl upholstery used on the seats, cushions, bolsters and for the headliner in some cabins, should be cleaned periodically with mild soap and water. Any stain, spill or soiling should be cleaned up promptly to prevent the possibility of permanent staining. When cleaning, always rub gently. Avoid using products containing ammonia, powdered abrasive cleaners, steel wool, ink, strong solvents, acetone and lacquer solvents or other harsh chemicals as they can cause permanent damage or shorten the life of vinyl. Never use steam heat, heat guns or hair dryers on vinyl.

Stronger cleaners, detergents and solvents may be effective in stain removal, but can cause either immediate damage or slow deterioration. Lotions, sun tan oil, waxes and polishes, etc., contain oils and dyes that can cause stiffening and staining of vinyls.

- Dry soil, dust and dirt Remove with a soft cloth.
- Dried on dirt Wash with a soft cloth dampened with water.
- Variations in surface gloss Wipe with a water dampened soft cloth and allow to air dry.
- Stubborn dirt Wash with a soft cloth dampened with Ivory Flakes® and water. Rinse with clean water.
- Stubborn spots and stains Spray with either Fantastik Cleaner® or Tannery Car Care Cleaner® and rub with a soft cloth. Rinse with clean water.
- Liquid spills Wipe immediately with a clean absorbent cloth. Rinse with clean water.

 Food grease and oily stains - Spray immediately using either Fantastik Cleaner® or Tannery Car Care Cleaner®, wiping with a soft cloth. Take care not to extend the area of contamination beyond its original boundary. Rinse with clean water.

### Acrylic Canvas (Sunbrella)

Modern, bright colored canvas tops are usually fabricated from acrylic fabrics with the trade names like Sunbrella®, Argonaut®, etc. Acrylic fabrics look similar to cotton canvas but are much more durable and color fast.

Acrylic canvas can be cleaned by using Ivory Flakes, Ivory Liquid or another mild soap and water. Scrub lightly and rinse thoroughly to remove the soap. Do not use detergents, as they will deteriorate the waterproofing in the fabric. The underside can be brushed with a soft brush and sprayed with a disinfectant to prevent the accumulation of dirt and mildew. The top or accessories should never be folded or stored wet.

In fresh water areas, the top and curtains should be washed weekly. This is particularly important if the boat is stored near a highway, airport or in a large city. Residue from jet fuel, exhaust fumes and industrial pollution can shorten the life of tops and enclosures.

In saltwater areas, the top and curtains should be rinsed with fresh water after each use and at least weekly if it is stored outside. Saltwater attracts moisture and dirt can shorten the life of fabric tops and enclosures. The salt is also abrasive and can cause premature wear in the fabric and stitching.

After several years, the acrylic canvas may lose some of its ability to shed water. If this occurs, wash the fabric and let it dry thoroughly. Then treat the outside surface with a commercially available waterproofing designed for this purpose. Waterproofing is available in bulk at most canvas shops. One-gallon garden sprayers are excellent for applying waterproofing.

### Notice:

Some leakage at the seams is normal and unavoidable with acrylic enclosures.

by Dougherty \_



### **Laminated Vinyl Tops**

Laminated vinyl top material is a lamination of two plies of specially formulated vinyl with an inner reinforcing core fabric. The most common trade name for this fabric is Weblon.® It is not unusual for the interior ply to be a different color than the exterior. There is a greater tendency for this type of fabric to leak at the seams than with acrylic or vinyl coated polyester. Paraffin wax that matches the top can be used to seal the seams if necessary.

Laminated vinyl fabrics should be cleaned periodically by using Ivory Flakes, Ivory Liquid or another mild soap and water. Scrub lightly and rinse thoroughly to remove the soap. Do not use detergents or harsh cleaners like bleach and ammonia. They will attack the vinyl in the fabric and shorten its life. The top or accessories should never be folded or stored wet.

In fresh water areas, the top and curtains should be washed weekly. This is particularly important if the boat is stored near a highway, airport or in a large city. Residue from jet fuel, exhaust fumes and industrial pollution can shorten the life of tops and enclosures.

In saltwater areas, the top and curtains should be rinsed with fresh water after each use and at least weekly if it is stored outside. Saltwater attracts moisture and dirt can shorten the life of fabric tops and enclosures. The salt is also abrasive and can cause premature wear in the stitching.

### **Clear Curtains and Connectors**

Side curtains and clear connectors can be cleaned with mild soap and water. They should not be allowed to become badly soiled. Dirt, oil, mildew and cleaning agents containing ammonia, will shorten the life of the vinyl that is used for clear curtains. After cleaning the curtains and allowing them to dry, apply a non-lemon furniture polish or an acrylic glass and clear plastic protector to extend the life of the curtains.

Vinyl curtains should be stored either rolled or flat, without folds or creases. Folding the curtains will make permanent creases that could cause the vinyl to crack.

#### Notice:

Do not use any polish containing lemon scents or lemon. The lemon juice will attack the vinyl and shorten its life. Snaps should be lubricated periodically with Teflon or silicone grease or a lubricant designed for snaps. Zippers should be lubricated with silicone spray, paraffin or silicone stick.

### Strataglass

Strataglass® is a special coated vinyl that could be used in the curtains for the hardtop enclosure. The coating protects the vinyl glass and resists scratching. Waxes and Plexiglas polishing compounds should not be used on strataglass as the protective coating prevents them from penetrating into the vinyl and they will build up on the surface. These products will create a hazy, greasy appearance that will affect the clarity of the strataglass. Products that repel water, like Rainex®, should not be used as they will not take well to the surface and could appear spotty and may also yellow or dull the Strataglass over time.

Strataglass can be cleaned by rinsing off dirt or salt deposits with fresh water, then washing with a clean cloth and mild soap. Chamois dry to remove water spots and improve clarity. If a polish is accidentally used, use Windex® or its equivalent to remove it. While window cleaners will destroy the standard vinyl normally used in side curtains and clear connectors, it will not harm strataglass. Always roll down the curtains and snap in place at the end of each day so the curtains will maintain their shape and to minimize fold distortions.

Depending upon usage, it is recommended that an occasional application of Aquatech Strataglass Cleaner be done. Treat this like a polish, as opposed to a cleaner - wash and dry curtains first, then apply Aquatech Strataglass Cleaner, actually buffing the surface to a beautiful sheen. This is not just a wipe on/ wipe off product...it needs to be buffed to perform.

Remember, the coating on strataglass is scratch resistant and not scratch proof. Always handle the curtains with care and never roll up curtains that are salty or dirty. If you have any questions about the clear curtains used on your boat, please contact the Everglades Customer Service Department.

Hardtop enclosures must be removed when trailering. Canvas enclosures are not designed to withstand the extreme wind pressure encountered while trailering and will be damaged. Always remove and properly store the enclosure before trailering your boat.



## **Everglades**<sup>®</sup>

### 13.3 Interior

The cabin or head interior can be cleaned just like you would clean a home interior. To preserve woodwork, use teak oil. To maintain carpeting, use a vacuum cleaner. Because air and sunlight are very good cleansers, periodically put cushions, sleeping bags, etc. on deck, in the sun and fresh air, to dry and air out. If cushions or equipment get wet with saltwater, remove and use clean, fresh water to rinse off the salt crystals. Salt retains moisture and will cause damage. Dry thoroughly and reinstall.

Vinyl headliner material should be cleaned periodically as explained in the previous section. Avoid using products containing ammonia, bleach or harsh chemicals as they can shorten the life of vinyl. Fiberglass headliners should be wiped down with a damp towel as necessary to remove dust and dirt.

If you leave the boat for a long period of time, put all cushions on their sides, open all interior cabin and locker doors and hang a commercially available mildew protector in the cabin.

#### Notice:

Always read the label carefully on mildew protectors. Remove the protector and allow the cabin to ventilate completely before using the cabin.

### **Counter Tops - Faux Granite**

A mild liquid detergent and water or disinfectant cleaners will remove most dirt and stains from Faux Granite. Rinse with a clean cloth moistened with fresh water. Wipe dry with a clean cloth.

Never use granite cleaners, bleaches, ammonia, household cleaners, polishes or scouring pads. Harsh cleaners and scouring pads will damage the polymer surface of Faux Granite.

In most cases, Faux Granite can be repaired if accidentally damaged. Small scratches that do not penetrate the coating can be repaired using an automotive buffing compound. Deep scratches and heavy damage require a professional repair. Contact your dealer or a counter top repair professional for assistance in repairing deep scratches or other damage on your counter tops.

### **Interior Woodwork**

Oiled and varnished woodwork or laminated, simulated wood can be cleaned with a damp cloth. For heavy duty cleaning, use a mixture of water and Murphy's Oil Soap or a solution of 10% white vinegar and water to clean the wood and wipe it dry with a clean towel. Apply a furniture polish to add luster and help to preserve the finish.

### 13.4 Bilge, Pumps and Components

To keep the bilge clean and fresh, it is recommended that you use a commercial bilge cleaner on a regular basis. Follow the directions carefully. All exposed pumps and metal components in the bilge should be sprayed periodically with a protector to reduce the corrosive effects of the high humidity always present in these areas.

Periodically check the bilge pumps and alarms for proper operation and clean debris from the strainers and float switches. Inspect all hoses, clamps and thru-hulls for leaks and tightness on a regular basis. Operate all thru-hull valves at least once a month to keep them operating properly.

Frequently test the automatic switches for the bilge pumps and alarms for proper operation. This is accomplished by lifting the float switch until the pump is activated. You can also use a garden hose to flood the bilge until the water level is high enough to activate the pump.

### Windshield Hydraulic System

The hydraulic pump operates at very high pressures and has specific maintenance requirements. Check the hydraulic oil level frequently or immediately following the repair of a leaking fitting or any hydraulic system service. Use only hydraulic oil meeting the pump manufacturer's specifications. Refer to the pump manufacturer's operating and information manual for information on the operation and maintenance of the hydraulic system and oil specifications. You should perform all recommended maintenance according to the pump manufacturers' specifications.



### Notice:

Always check the hydraulic oil level with the windshield down to provide an accurate oil level reading and avoid overfilling the reservoir.

- Inspect all hoses, fittings, valves and seals for leaks and proper operation monthly.
- Periodically inspect all electrical connections, paying close attention to the heavy electrical wires, to make sure the connectors are corrosion free and tight. Corroded terminals should be thoroughly cleaned with sandpaper or replaced, tightened securely and sprayed with a metal and electrical protector. Coating the connectors with dielectric, Teflon or silicone grease will protect them and reduce future corrosion.

### 13.5 Drainage System

It is essential that the following items be done periodically to maintain proper drainage of your boat:

- Clean the cockpit drains with a hose to remove debris that can block water drainage.
- Clean the hardtop leg drain holes. This is especially important just before winter lay-up.
- Flush all gravity drains with fresh water to keep them clean and free flowing.
- Operate the thru-hull valves once a month and service as required.
- Run all overboard pumps briefly at least once a month to keep them operating properly.

#### Notice:

All drains and pumps must be properly winterized before winter lay-up.

### SEASONAL MAINTENANCE

### **14.1 Storage and Lay-up** Before Hauling:

- Pump out the head holding tank. Flush the holding tank using clean water, soap and a deodorizer. Pump out the cleaning solution.
- The fuel tank should be left nearly full to reduce condensation that can accumulate in the tank. Allow enough room in the tank for the fuel to expand without leaking out the vent. Moisture from condensation in the fuel tank can reach such concentrations that it becomes heavy enough to settle out of the fuel to the bottom of the tank. Since fuel pickup tubes are located near the bottom of the tank, this accumulated moisture can cause the engines to run poorly or not at all after extended storage.

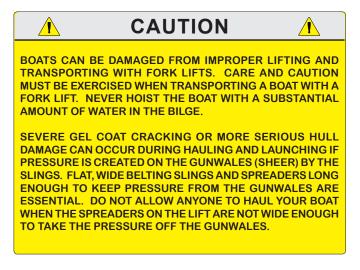
Chemical changes also occur as the gasoline ages that can cause deposits and varnish in the fuel system as well as reduce the octane rating of the fuel. Severely degraded fuel can damage the engines and boat fuel tank and lines. Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month or during winter storage, a fuel stabilizer should be added to the gasoline to help protect the fuel system from these problems. Operate the boat for at least 15 minutes after adding the stabilizer to allow the treated fuel to reach the engines. Yamaha recommends using Yamaha Fuel Conditioner and Stabilizer for their engines.

Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel stabilizers recommended for your engines. For more recommendations for your specific area, check with your local Everglades dealer.

- Drain water from the fresh water system.
- Consult the engine owner's manual for detailed information on preparing the engines for storage.

### Lifting

It is essential that care be used when lifting your boat. Make sure the spreader bar at each sling is at least as long as the distance across the widest point of the boat that the sling will surround. Put the slings in position. Sling labels on the gunnels just above the rubrail identify the correct position for the lifting slings. The fore and aft slings should be tied together to prevent the slings from sliding on the hull.



### **Supporting The Boat For Storage**

A trailer, elevating lift, well-made cradle or proper blocking is the best support for your boat during storage.

## When storing the boat on a trailer for a long period:

- Make sure the trailer is large enough to properly support your boat and that it is rated to support the weight.
- Make sure the trailer is on a level surface and the bow is high enough so that water will drain from the bilge and cockpit.
- Make sure the engines are in the down position.

by Dougherty.



- The trailer must properly support the hull. The bunks and rollers should match the bottom of the hull and should not be putting pressure on the lifting strakes.
- Make sure the hitch is properly supported.
- Check the tires once each season. Add enough air for the correct amount of inflation for the tires as necessary.

### Notice:

#### Read the owner's manual for the trailer for the correct amount of inflation for the tires.

### When storing the boat on a lift or cradle:

- The cradle must be specifically for boat storage.
- Make sure the cradle or lift is well supported with the bow high enough to provide proper drainage of the bilge and cockpit.
- Make sure the engines are in the down position.
- The cradle or lift must be in the proper fore and aft position to properly support the hull. When the cradle or lift is in the correct location, the bunks should match the bottom of hull and should not be putting pressure on the lifting strakes.



BOATS HAVE BEEN DAMAGED BY TRAILERS, LIFTS AND CRADLES THAT DON'T PROPERLY SUPPORT THE HULL. ALWAYS MAKE SURE THE BUNKS AND ROLLERS ARE ADJUSTED SO THEY ARE NOT PUTTING PRESSURE ON THE LIFTING STRAKES AND ARE PROVIDING ENOUGH SUPPORT FOR THE HULL. HULL DAMAGE RESULTING FROM IMPROPER CRADLE OR TRAILER SUPPORT IS NOT COVERED BY THE EVERGLADES WARRANTY.

### When supporting the boat with blocking:

- Make sure the boat is blocked on a level surface and the bow is high enough so that water will drain from the bilge and cockpit.
- Make sure the keel is supported with large, solid wood blocks in at least three points.

• Use at least three heavy duty jacks on each side of the hull and make sure the boat is level from side to side. The jacks must be on a solid surface like packed gravel, concrete or pavement. All of the supports must be set up properly to prevent the boat from shifting while it is in storage.

### **Preparing The Boat For Storage:**

- Remove the bilge drain plug, if installed.
- Thoroughly wash the fiberglass exterior, especially the antifouling portion of the bottom. Remove as much marine growth as possible. Lightly wax the exterior fiberglass components.
- Remove all oxidation from the exterior hardware and apply a light film of moisture displacing lubricant, wax or a metal protector.
- Remove propellers and grease the propeller shafts using light waterproof grease.
- Remove the batteries and store in a cool place. Clean using clear, clean water. Be sure the batteries have sufficient water and clean terminals. Keep the batteries charged and safe from freezing throughout the storage period.

### Notice:

# Refer to the Electrical System chapter, for information on the maintenance of the AC and DC electrical systems.

- Coat all faucets and exposed electrical components in the cabin and cockpit with a protecting oil.
- Clean out, totally drain and completely dry the fish boxes, coolers, sinks and baitwells.
- Thoroughly clean the interior of the boat. Vacuum all carpets and dry clean drapes and upholstery.
- Remove cushions and open as many locker doors as possible. Leaving as many of these areas open as possible will improve the boat's ventilation during the storage period.

#### Notice:

It is recommended that a mildew preventer be hung in the head compartment before it is closed for storage.



## **Everglades**<sup>®</sup>

 Clean the exterior upholstery with a good vinyl cleaner and dry thoroughly. Spray the weather covers and boat upholstery with a spray disinfectant. Enclosed areas such as the head compartment, shower sump, storage locker areas, etc. should also be sprayed with disinfectant.

### 14.2 Winterizing

### **Fresh Water System**

The entire fresh water system must be completely drained. Disconnect all hoses, check valves, etc. and blow all the water from the system. Make sure the filters and fresh water tank are completely drained. Use only very low air pressure when doing this to prevent possible system damage. Because of the check valve mechanism built in the pump, blowing the lines will not remove the water from the fresh water pump. Remove the inlet and outlet hoses on the pump. Turn the pump on and allow it to pump out any remaining water....about a cupful. A recommended alternative to the above-mentioned procedure is the use of commercially available non toxic, fresh water system antifreeze. After draining the fresh water tank, lines and filters, pour the antifreeze mixture into the fresh water tank, prime and operate the pump until the mixture flows from all fresh water faucets. Be sure to open all water faucets, including the fresh water washdown hose. Make sure antifreeze has flowed through all of the fresh water drains.

For additional information refer to the Fresh Water System and Drainage System chapters.

#### **Raw Water System**

Completely drain the raw water systems including the sea strainers in the stern bilge. Disconnect all hoses and blow the water from the system. Use only very low air pressure when doing this to prevent possible system damage. Because of the check valve mechanism built in the raw water washdown pump, blowing the lines will not remove the water from the raw water pump. Remove the inlet and outlet hoses on the pump. Turn the pump on and allow it to pump out any remaining water....about a cupful.

A recommended alternative to the above-mentioned procedure is the use of commercially available nontoxic, potable water system antifreeze. If potable water antifreeze is used, pour the mixture into a pail and put the raw water intake lines into the solution. Run the pumps one at a time until the antifreeze solution is visible at all raw water faucets and discharge fittings and drains. Be sure antifreeze has flowed through all of the raw water drains.

Make sure to run the fish box pumps until all the water is removed from the fish boxes and the pump. Then pour potable water antifreeze in each fish box and activate the pumps until antifreeze is visible at the discharge thru-hull fittings. To avoid damage to the pump, be careful not to run the pump dry for more than a few seconds.

Make sure all water is removed from the livewell and that the drain is clear and free flowing. Install the livewell drain plug, pour potable water antifreeze in livewell and activate the recirculation pump until antifreeze is visible at the discharge fitting. Remove the drain plug and wipe down the inside of the baitwell.

Refer to the Raw Water System chapter for additional information on the raw water system.

### **Optional Air Conditioner**

Disconnect and drain the seawater pump intake and discharge hoses. Remove all water from the sea strainer and thru-hull fitting. Allow all water to drain from the system. The air conditioner components must be properly winterized by following winterizing procedure in the manufacturer's owner's manual.

The air conditioning condensation drain system must be properly winterized. Clean debris from the drain and flush for several minutes with fresh clean water. After the system is clean, pour a potable water antifreeze mixture into each drain pan until antifreeze is visible in the sump system.

### NOTICE:

The air conditioning, marine head, and steering systems have specific lay up requirements. Please refer to their owner's manuals for recommended winterizing procedures.

### **Marine Toilet**

The marine toilet must be properly winterized by following the manufacturer's winterizing instructions in the marine toilet owner's manual. Drain the intake and discharge hoses completely using low air pressure if necessary. The head holding tank and overboard discharge pump must be pumped dry and one gallon of potable water

by Dougherty \_



antifreeze poured into the tank through the deck waste pump out fitting. After the antifreeze has been added to the holding tank, open the overboard discharge valve and activate the overboard macerator pump until the antifreeze solution is visible at the discharge thru-hull.

### Notice:

## Make sure you follow the marine toilet manufacturer's winterizing instructions exactly.

### Bilge

Coat all metal components, wire busses and connector plugs in the bilge with a protecting oil. It is also important to protect all strainers, seacocks and steering components. The bilge pumps and bilge pump lines must be completely free of water and dried out when the boat is laid-up for the winter in climates where freezing occurs. Compartments in the bilge that will not drain completely should be pumped out and then sponged until completely free of water. Dry the hull bilge and self-bailing cockpit troughs. Water freezing in these areas could cause damage.

### **Outboard Engines**

The engines should be flushed with fresh water for at least 15 minutes prior to winter storage. This will remove salt, sand and other contaminates that can damage the engine. It is also important to "Fog" the cylinders, change the gear oil, change the oil in 4-cycle engines, coat each engine with a protector, wax the exterior and properly store and charge the batteries. You should refer to the engine owner's manual or contact your dealer for specific instructions on winterizing your engines.

### Notice:

Properly winterize the engines and fuel system by following the engine manufacturer's winterizing procedures located in your engine owner's manuals or contact an Everglades dealer.

### **Pilot House**

It is imperative that all drain holes in aluminum fabrications are open and that they are completely free of water. Remove all electronics. Coat all wire connectors and bus bars in the helm compartment with a protecting oil.

Clean the aluminum components and windshield slide tracks with soap and water and dry thoroughly. Apply an automotive or boat wax to powder coated aluminum to protect it during storage periods. Clean pilot house sliding door tracks with soap and water and dry thoroughly. Spray the sliding door latches, locks and safety pins with a lubricant/ metal protector to keep them free and protected from corrosion. Inspect the latches for damage or wear. Replace damaged or worn latches or components.

### Crow's Nest (Optional)

It is imperative that all drain holes in the Crow's Nest and hardtop legs are open and completely free of water. Remove the Crow's Nest belly band or removable cushions. Then thoroughly clean and store in a safe, dry place.

Clean the aluminum frame with soap and water and dry thoroughly. Apply an automotive or boat wax to powder coated aluminum to protect it during storage periods.



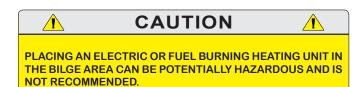
### **Special Notes Prior To Winter Storage**

If the boat will be in outside storage, properly support a storage cover and secure it over the boat. It is best to have a frame built over the boat to support the canvas. It should be a few inches wider than the boat so the canvas will clear the rails and allow passage of air. If this cover is fastened too tightly there will be inadequate ventilation and this can lead to mildew, moisture accumulation, etc. It is essential to fasten the canvas down securely so that the wind cannot remove it or cause chafing of the hull superstructure. Do not store the boat in a damp storage enclosure. Excessive dampness can cause electrical problems, corrosion and excessive mildew.

Whenever possible, do not use the bimini top or convertible top canvas in place of the winter storage cover. The life of these canvases may be significantly shortened if exposed to harsh weather elements for long periods.







Proper storage is very important to prevent serious damage to the boat. If the boat is to be stored indoors, make sure the building has enough ventilation. It is very important that there is enough ventilation both inside the boat and around the boat.

#### Notice:

If the boat is to be stored indoors or outdoors, open all interior drawers, clothes lockers, cabinets and doors a little. If possible, remove the upholstery, mattresses, clothing and rugs. Then hang a commercially available mildew protector in the interior compartments.

### 14.3 Recommissioning



#### Notice:

It is important and recommended that the fitting out procedure for the marine gear be done by a qualified service person. Read the engine owner's manual for the recommended procedure.



#### **Reactivating The Boat After Storage:**

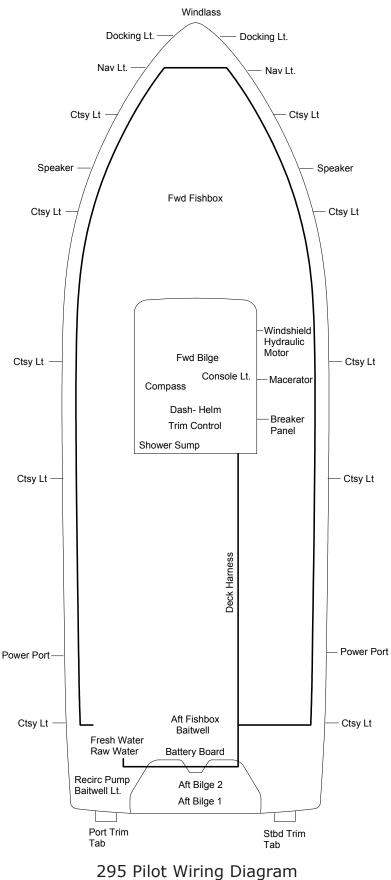
- Charge and install the batteries.
- Install the drain plug in the hull.
- Check the engines for damage and follow the manufacturer's instructions for recommissioning.
- Check the mounting bolts for the engines to make sure they are tight.
- Perform all routine maintenance.
- Check all hose clamps for tightness.
- Pump the antifreeze from the fresh and raw water systems and flush several times with fresh water.
- Check and lubricate the steering system.
- Clean and wash the boat.
- Install all upholstery, cushions and canvas.

### After Launching:

- Carefully check all water systems and the engine bolts for leaks. Operate each system one at a time checking for leaks and proper operation.
- Check the bilge pump manual and automatic switches.
- When each engine starts, check the cooling system port below the engine cowling for a strong stream of water. This ensures that the cooling pump is operating.
- Carefully monitor the gauges and check for leakage and abnormal noises.
- Operate the boat at slow speeds until the engine temperature stabilizes and all systems are operating normally.

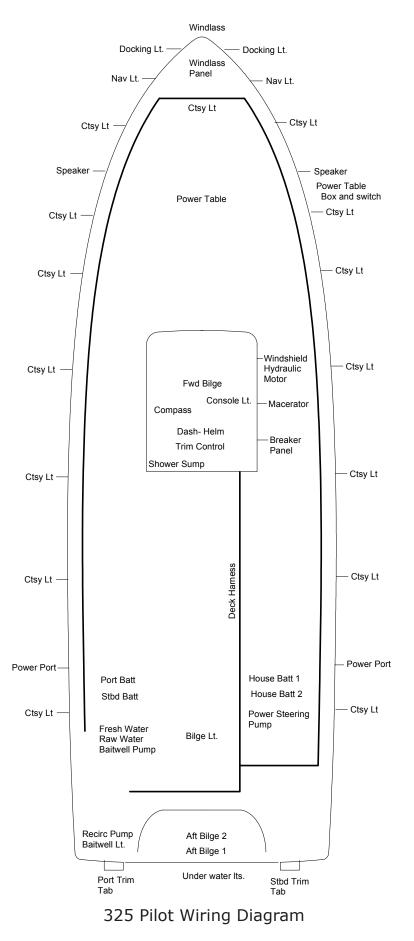
THIS PAGE WAS LEFT BLANK INTENTIONALLY

## **SCHEMATICS**



### **Schematics**

## **Everglades**<sup>™</sup>





### **GLOSSARY OF TERMS**



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.

Ashore: On shore.

Astern: Behind the boat, to move backwards.

**Athwartship:** At right angles to the center line of the boat.

**Barnacles:** Small, hard-shelled marine animals which are found in salt water attached to pilings, docks and bottoms of boats.

**Beam:** The breadth of a boat usually measured at its widest part.

**Bearing:** The direction of an object from the boat, either relative to the boat's direction or to compass degrees.

**Berth:** A bunk or a bed on a boat.

**Bilge:** The bottom of the boat below the flooring.

**Bilge Pump:** A pump that removes water that collects in the bilge.

**Boarding:** Entering or climbing into a boat.

**Boarding Ladder:** Set of steps temporarily fitted over the side of a boat to assist persons coming aboard.

**Boat Hook:** Short shaft of wood or metal with a hook fitting at one end shaped to aid in extending one's reach from the side of the boat.

Bow: The front end of a boat's hull

**Bow Line:** A line that leads forward from the bow of the boat.

**Bow Rail:** Knee high rails of solid tubing to aid in preventing people from falling overboard.

**Bridge:** The area from which a boat is steered and controlled.

**Bridge Deck:** A deck forward and usually above the cockpit deck.

**Broach:** When the boat is sideways to the seas and in danger of capsizing; a very dangerous situation that should be avoided.

**Bulkhead:** Vertical partition or wall separating compartments of a boat.

**Cabin:** Enclosed superstructure above the main deck level.

**Capsize:** When a boat lays on its side or turns over.

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

**Cleat:** A deck fitting, usually of metal with projecting arms used for securing anchor and mooring lines.

**Closed Cooling System:** A separate supply of fresh water that is used to cool the engine and circulates 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, usually in the aft deck, outside of the cabin.

**Companionway:** Opening in the deck of a boat to provide access below.

**Compartment:** The interior of a boat divided off by bulkheads.

**Cradle:** A framework designed to support a boat as she is hauled out or stored.

**Cutlass Bearing:** A rubber bearing in the strut that supports the propeller shaft.

by Dougherty \_

### **Glossary of Terms**



**Deck:** The floor-like platform of a boat that covers the hull.

**Displacement:** The volume of water displaced by the hull. The displacement weight is the weight of this volume of water.

**Draft:** The depth of water a boat needs to float.

Dry Rot: A fungus attack on wood areas.

**Dry-dock:** A dock that can be pumped dry during boat construction or repair.

**Electrical Ground:** A connection between an electrical connector and the earth.

**Engine Beds:** Sturdy structural members running fore and aft on which the inboard engines are mounted.

**EPIRB:** Emergency Position Indicating Radio Beacon. Operates as a part of a worldwide satellite distress system.

**Even Keel:** When a boat floats properly as designed.

**athom:** A measure of depth. One Fathom = 6 feet.

**Fender:** A soft object of rubber or plastic used to protect the topsides from scarring and rubbing against a dock or another vessel.

**Fend off:** To push or hold the boat off from the dock or another boat.

Flying Bridge: A control station above the level of the deck or cabin.

**Flukes:** The broad portions of an anchor which dig into the ground.

**Fore:** Applies to the forward portions of a boat near the bow.

**Foundering:** When a boat fills with water and sinks.

**Freeboard:** The height from the waterline to the lowest part of the deck.



**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.

**and 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:** An opening in the deck with a door or lid to allow for access down into a compartment of a boat.

Head: A toilet on a boat.

**Heat Exchanger:** Used to transfer the heat that is picked up by the closed cooling system to the raw cooling water.

**Helm:** The steering and control area of a boat.

**Hull:** The part of the boat from the deck down.

**Lnboard:** A boat with the engine mounted within the hull of the boat. Also refers to the center of the boat away from the sides.

**Inboard/outboard:** Also stern drive or I/O. A boat with an inboard engine attached to an outboard drive unit.

**Keel:** A plate or timber plate running lengthwise along the center of the bottom of a boat.

**Knot:** Unit of speed indicating nautical miles per hour. 1 knot = 1 nautical mile per hour (1.15 miles per hour). A nautical mile is equal to one minute of latitude: 6076 feet. Knots times 1.15 equals miles per hour. Miles per hour times .87 equals knots.

**Lay-up:** To decommission a boat for the winter (usually in northern climates).

**Leeward:** The direction toward which the wind is blowing.



### **Glossary of Terms**



**Length On The Waterline (I.w.I.):** A length measurement of a boat at the waterline from the stern to where the hull breaks the water near the bow.

**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 where it can be pumped overboard.

**Line:** The term used to describe a rope when it is on a boat.

**Lists:** A boat that inclines to port or starboard while afloat.

**L.O.A.:** Boat length overall.

**Locker:** A closet, chest or box aboard a boat.

**Loran:** An electronic navigational instrument which monitors the boat's position using signals emitted from pairs of transmitting stations.

**Lunch hook:** A small light weight anchor typically used instead of the working anchor. Normally used in calm waters with the boat attended.

**Midships:** The center of the 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:** A boat secured with cables, lines or anchors.

**Mooring:** An anchor permanently embedded in the bottom of a harbor that is used to secure a boat.

**Nautical Mile:** A unit of measure equal to one minute of latitude. (6076 feet)

**Nun Buoy:** A red or red-striped buoy of conical shape.

**Outboard:** A boat designed for an engine to be mounted on the transom. Also a term that refers to objects away from the center line or beyond the hull sides of a boat.

**Pad Eye:** A deck fitting consisting of a metal eye permanently secured to the boat.

**Pier:** A structure which projects out from the shoreline.

**Pile or Piling:** A long column driven into the bottom to which a boat can be tied.

**Pitching:** The fore and aft rocking motion of a boat as the bow rises and falls.

**Pitch:** The measure of the angle of a propeller blade. Refers to the theoretical distance the boat travels with each revolution of the propeller.

P.F.D: Personal Flotation Device.

**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:** A device having two or more blades that is attached to the engine and used for propelling a boat.

**Propeller Shaft:** Shaft which runs from the back of the engine gear box, aft, through the stuffing box, shaft log, struts and onto which the propeller is attached.

**Pyrotechnic Distress Signals:** Distress signals that resemble the brilliant display of flares or fireworks.

**Raw Water Cooled:** Refers to an engine cooling system that draws seawater in through a hull fitting or engine drive unit, circulates the water in the engine and then discharges it overboard.

**Reduction Gear:** Often combined with the reverse gear so that the propeller turns at a slower rate than the engine.

**Reverse Gear:** Changes the direction of rotation of the propeller to provide thrust in the opposite direction for stopping the boat or giving it sternway.

**Roll:** A boat's sideways rotational motion in rough water.

**Rope Locker:** A locker, usually located in the bow of a boat, used for stowing the anchor line or chain.

**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.

**Sea anchor:** An anchor that does not touch the bottom. Provides drag to hold the bow in the most favorable position in heavy seas.

by Dougherty \_

### **Glossary of Terms**



**Scupper:** An opening in the hull 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.

**Sling:** A strap which will hold the boat securely while being lifted, lowered or carried.

**Slip:** A boat's berth between two pilings or piers.

**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.

**Steerageway:** Sufficient speed to keep the boat responding to the rudder or drive unit.

**Stem:** The vertical portion of the hull at the bow.

**Stern:** The rear end of a boat.

Stow: To pack away neatly.

**Stringer:** Longitudinal members fastened inside the hull for additional structural strength.

**Strut:** Mounted to the hull which supports the propeller shaft in place.

Strut Bearing: See "cutlass bearing."

**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.

**affrail:** Rail around the rear of the cockpit.

**Thru-hull:** A fitting used to pass fluids (usually water) through the hull surface, either above or below the waterline.

**Topsides:** The side skin of a boat between the waterline or chine and deck.

**Transom:** A flat stern at right angles to the keel.

**Travel Lift:** A machine used at boat yards to hoist boats out of and back into the water.

**Trim:** Refers to the boat's angle or the way it is balanced.

**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 its motion.

**Wash:** The flow of water that results from the action of the propeller or propellers.

**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. Refers to the anchor used in typical anchoring situations.

**Windlass:** A winch used to raise and lower the anchor.

**Windward:** Toward the direction from which the wind is coming.

**Y** acht Basin: A protected facility primarily for recreational small craft.

**Yaw:** When a boat runs off her course to either side.



Date	Hours	Dealer	Service/Repairs

by Dougherty \_\_\_\_\_

**Everglades**<sup>®</sup>

Date	Hours	Dealer	Service/Repairs

\_ by Dougherty



## MAINTENANCE LOG

Date	Hours	Dealer	Service/Repairs
I			

by Dougherty 🗕

**Everglades**<sup>™</sup>

Date	Hours	Dealer	Service/Repairs

\_ by Dougherty



by Dougherty \_\_\_\_\_



Date	Hours	Dealer	Service/Repairs

by Dougherty

# **Everglades**<sup>®</sup>

DEPARTMENT OF TRANSPORTATION BOATING ACC U.S. COAST GUARD CG-3865 (Rev. 9/95)		CIDENT REPORT FORM APPROVED		ED OMB NO. 2115-0010				
U.S. COAST GUARD CO	5-3603 (Rev. 9/93)	STATE ASSIGNE	=D C/	ASE NO				
THE OPERATOR/OWNER OF A VESSEL USED FOR RECREATIONAL PURPOSES IS REQUIRED TO FILE A REPORT IN WRITING WHENEVER AN ACCIDENT RESULTS IN: LOSS OF LIFE OR DISAPPEARANCE FROM A VESSEL; AN INJURY WHICH REQUIRES MEDICAL TREATMENT BEYOND FIRST AID; OR PROPERTY DAMAGE IN EXCESS OF \$2000 OR COMPLETE LOSS OF THE VESSEL. REPORTS IN DEATH AND INJURY CASES MUST BE SUBMITTED WITHIN 48 HOURS. REPORTS IN OTHER CASES MUST BE SUBMITTED WITHIN 48 HOURS. REPORTS IN OTHER CASES MUST BE SUBMITTED WITHIN 10 DAYS. REPORTS MUST BE SUBMITTED TO THE REPORTING AUTHORITY IN THE STATE WHERE THE ACCIDENT OCCURRED. THIS FORM IS PROVIDED TO ASSIST THE OPERATOR IN FILING THE REQUIRED WRITTEN REPORT.								
COMPLETE ALL BLOCKS (INDICATE THOSE NOT APPLICABLE BY "NA") ACCIDENT DATA								
DATE OF ACCIDENT		AM NAME OF BC			LOCATIO	N (GIVE LOC	ATION PI	RECISELY)
NUMBER OF VESSELS INVOLVED	NEAREST CITY OR T	PM DWN	COL	JNTY		STATE		ZIP CODE
(CHECK ALL APPLICABLE)         [ ] CLEAR       [ ] RAIN         [ ] CLOUDY       [ ] SNOW         [ ] FOG       [ ] HAZY	E) [ ] CALM (WAVES LESS THAN 6") (I		(EST AIR_	TIMATE) [ °F [ [ FER ○F [	/IND ] NONE ] LIGHT (0-6 MPH) ] MODERATE (7-14 MPH) ] STRONG (15-25 MPH) ] STORM (OVER 25 MPH)		)	VISIBILITY DAY NIGHT [ ] GOOD [ ] [ ] FAIR [ ] [ ] POOR [ ]
NAME OF OPERATOR			OPE		SS			I
OPERATOR TELEPHONE NU ( ) [ ] MALE [ ] FEMA	MO DAY	YR [] N [] U	IONE INDEI 100 I	R 100 HOURS HOURS	[ ] STA	G AUXILIARY	[][	FETY J.S. POWER SQUADRON MERICAN RED CROSS
NAME OF OWNER			OWD	NER ADDRESS				
OWNER TELEPHONE NUMB ( )	ER NUMBER OF P ON BOARD	PEOPLE		IBER OF PEOPL NG TOWED	E		ED BOAT ES [	
				1 (THIS VESSEL	,			
BOAT REGISTRATION OR D	OCUMENTATION NUN	1BER STATE	:   ł	HULL IDENTIFIC	ATION NUM	1BER	BOAT	NAME
BOAT MANUFACTURER		LENGT	ни	MODEL			YEAR E	BUILT
TYPE OF BOAT       HULL MATERIAL         [] OPEN MOTORBOAT       [] WOOD         [] CABIN MOTORBOAT       [] ALUMINUM         [] AUXILIARY SAIL       [] STEEL         [] AUXILIARY SAIL       [] FIBERGLASS         [] SAIL (ONLY)       [] FIBERGLASS         [] CANOE/KAYAK       [] RUBBER/VINYL/CANVAS         [] PERSONAL WATERCRAFT       [] OTHER (SPECIFY)		S NYL/CANVAS INFLATABLE ECIFY)	[ ] [ ] [ ] FUEL	OUTBOARD [ ] PROPELLE INBOARD [ ] WATER JE INBOARD- STERNDRIVE (I/O) AIRBOAT [ ] MANUAL [ ] SAIL EL NUMBER OF		ROPELLER ATER JET R THRUST ANUAL	PERSONAL FLOTATION DEVICES         (PFDS):       WAS BOAT ADEQUATELY         EQUIPPED WITH COAST GUARD         APPROVED PFDS?         []       YES         []       NO	
[ ] PONTOON BOAT [ ] HOUSEBOAT [ ] OTHER (SPECIFY)			[]	DIESEL			ON BOA USED?	ARD? [ ] YES [ ] NO [ ] YES [ ] NO CONTRIBUTED TO ACCIDENT?
OPERATION AT TIME OF AC (CHECK ALL APPLICABLE) [ ] CRUISING [ ] CHANGING DIRECTION [ ] CHANGING SPEED [ ] DRIFTING [ ] BEING TOWED [ ] ROWING/PADDLING [ ] SAILING [ ] LAUNCHING [ ] LAUNCHING [ ] DOCKING/UNDOCKING [ ] AT ANCHOR [ ] TIED TO DOCK/MOORI [ ] OTHER (SPECIFY) ESTIMATED SPEED [ ]	(CHECK AN [] FISHIN [] TOL [] HUNTII [] SWIMM [] MAKIN [] MAKIN [] MAKIN [] RACIN [] RACIN [] FUELIN [] START [] NON-R	T TIME OF ACCID Y IF APPLICABLE G IRNAMENT NG IING/DIVING 3 REPAIRS RSKIING/TUBING/ 3 WATER SPORTS IG ECREATIONAL (SPECIFY) UNDER 10 MF	ENT ) ETC.	H       TYPE OF ACCIE       [ ] GROUNDIN       [ ] FLOODING       [ ] FLOODING       [ ] FIRE OR E       [ ] FIRE OR E       [ ] FIRE OR E       [ ] SKIER MIS       [ ] COLLISION       [ ] FALLS OVI       [ ] FALLS INE       [ ] STRUCK B       [ ] STRUCK B	ORSEPOWI DENT NG 3 3/SWAMPIN XPLOSION XPLOSION XPLOSION HAP N WITH VES N WITH FLC ERBOARD 30AT Y BOAT Y BOAT Y MOTOR/I UBMERGEI PECIFY)	IG (FUEL) (OTHER) SSEL ED OBJECT DATING OBJ. PROPELLER	(CHECK [ ] WE [ ] EX [ ] IMF [ ] RE [ ] MA [ ] HA [ ] HA [ ] HA [ ] HU [ ] MA [ ] CO [ ] CO [ ] CO [ ] CA	ALL APPLICABLE) EATHER CESSIVE SPEED PROPER LOOKOUT STRICTED VISION 'ERLOADING PROPER LOADING ZARDOUS WATERS COHOL USE UG USE LL FAILURE CHINERY FAILURE UIPMENT FAILURE IERATOR INEXPERIENCE ERATOR INATTENTION MGESTED WATERS SSENGER/SKIER BEHAVIOR M/LOCK HER (SPECIFY)

by Dougherty 🗕

#### **Boating Accident Report**

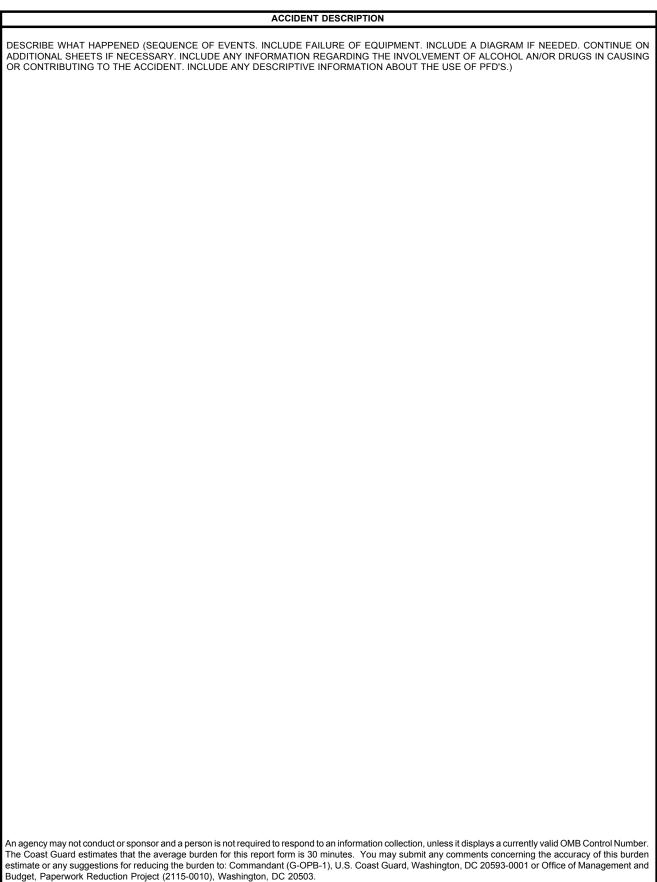
# **Everglades**<sup>®</sup>

DECEASED (IF MORE THAN 2 FATALITIES, ATTACH ADDITIONAL FORMS)					
NAME OF VICTIM		ADDRESS OF VICTIM	WAS PFD WORN? [ ] YES		
DATE OF BIRTH [] MALE [] FEMALE	E DEATH CAUSED BY	Y [ ] DROWNING [ ] OTHER [ ]	DISAPPEARANCE		
NAME OF VICTIM		ADDRESS OF VICTIM	WAS PFD WORN? [		
DATE OF BIRTH [] MALE [] FEMALE	DEATH CAUSED BY	YES ([] DROWNING [] OTHER [] DISAMADEARANCE			
	RED (IF MORE THAN	2 INJURIES, ATTACH ADDITIONAL FORMS)			
NAME OF VICTIM		ADDRESS OF VICTIM			
ADMITTED TO HOSPITAL	?	[ ] YES [ ] NO DESCRIBE INJURY [ ] YES [ ] NO			
WAS PFD WORN? [ ] YES [ ] NO WAS IT INFLATABLE? [ ] YES [ ] NO NAME OF VICTIM	PRIOR TO ACCIDE	ENT? [] YES [] NO AS A RESULT OF ACCIDENT? [	] YES [ ] NO		
ADMITTED TO HOSPITAL	2	[] YES       [] NO       DESCRIBE INJURY         [] YES       [] NO			
WAS PFD WORN? [ ] YES [ ] NO WAS IT INFLATABLE? [ ] YES [ ] NO	PRIOR TO ACCIDE	ENT? [ ] YES [ ] NO AS A RESULT OF ACCIDENT? [	] YES [] NO		
	BOARD THIS BOAT (I	IF MORE THAN 2 PEOPLE, ATTACH ADDITIONAL FORMS)			
NAME		ADDRESS			
DATE OF BIRTH WAS PFD WORN? AS A RESULT OF ACCIDE		[ ] NO PRIOR TO ACCIDENT? [ ] YES [ ] NO [ ] NO WAS IT INFLATABLE? [ ] YES [ ] NO			
NAME		ADDRESS			
DATE OF BIRTH WAS PFD WORN? AS A RESULT OF ACCIDE	[ ] YES NT [ ] YES	[] NO         PRIOR TO ACCIDENT?         [] YES         [] NO           [] NO         WAS IT INFLATABLE?         [] YES         [] NO			
BOAT NO. 2 (IF MORE THAN 2 VESSELS, ATTACH ADDITIONALIDENTIFYING INFORMATION)					
NAME OF OPERATOR		OPERATOR ADDRESS			
OPERATOR TELEPHONE NUMBER ( )		BOAT REGISTRATION OR DOCUMENTATION NUMBER STATE			
NAME OF OWNER		OWNER ADDRESS			
OWNER TELEPHONE NUMBER					
PROPERTY DAMAGE           ESTIMATED AMOUNT:         THIS BOAT AND CONTENTS:         OTHER BOAT(S) AND CONTENTS:         OTHER PROPERTY:					
\$	INTENTS.	\$			
DESCRIBE PROPERTY DAMAGED					
NAME	ADDRESS	SES NOT ON THIS VESSEL TELEPH	ONE NUMBER		
		(	)		
NAME ADDRESS		ТЕLЕРН 	ONE NUMBER )		
		N COMPLETING REPORT			
NAME ADDRESS		TELEPH (	ONE NUMBER )		
		[ ] OPERATOR [ ] OWNER DATE SI [ ] INVESTIGATOR [ ] OTHER DATE SI	UBMITTED		
FOR AGENCY USE ONLY					
CAUSES BASED ON (CHECK ONE): []THIS REPORT [] INVESTIGATION [] INVESTIGATION AND THIS REPORT [] OTHER					
NAME OF REVIEWING OFFICE		ECEIVED RECREATIONAL [] NON-REPORTABLE [ COMMERCIAL []			
PRIMARY CAUSE		SECONDARY CAUSE			

Call the Coast Guard Infoline 1-800-368-5647 for information on Federal Requirements for Recreational Boats

\_ by Dougherty

## **Everglades**<sup>®</sup>



by Dougherty \_

THIS PAGE WAS LEFT BLANK INTENTIONALLY



#### **FLOAT PLAN**

Everglades recommends filling out a float plan each time you use your boat for an offshore day trip or a long cruise. Leave this information with a responsible person ashore, like a close friend or relative that you know well.

Description of boat.		
Туре	Color	Trim
Name	Make	Other Info
Engine type		H.P
No. of Engines	Fuel Capacity	
Survival equipment: (Check as ap	propriate)	
PFDS	Flares	Mirror
Smoke Signals	Flashlight	Food
Paddles	Water	Others
Anchor	Raft or Dinghy	EPIRB
Radio Yes N	о Туре	
A		
Automobile license		
Туре	Trailer License	
Color	and make of auto	
Persons aboard		
Persons aboard Name	Age Add	ress & telephone No
Persons aboard Name	Age Add	ress & telephone No
Persons aboard Name	Age Add	ress & telephone No
Persons aboard Name	Age Add	ress & telephone No
Name	Age Add	ress & telephone No
Name  Do any of the persons aboard have	e a medical problem?	
Name	e a medical problem?	ress & telephone No
Name  Do any of the persons aboard have Yes No	Age Add Add e a medical problem? o If yes, what?	
Name Do any of the persons aboard have YesNo Trip Expectations: Leave at	Age Add e a medical problem? o If yes, what?	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From	Age Add e a medical problem? o If yes, what? Going to	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From Expect to return by	Age Add e a medical problem? o If yes, what? Going to (time)	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From Expect to return by	Age Add e a medical problem? o If yes, what? Going to	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From Expect to return by and no later than	Age Add e a medical problem? o If yes, what? Going to (time)	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From Expect to return by	Age Add e a medical problem? o If yes, what? Going to (time)	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From Expect to return by and no later than Any other pertinent info If not returned by	Age Add e a medical problem? o If yes, what? Going to (time)	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From Expect to return by and no later than Any other pertinent info If not returned by	Age Add e a medical problem? o If yes, what? Going to (time)	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From Expect to return by and no later than Any other pertinent info If not returned by	Age Add e a medical problem? o If yes, what? Going to (time)	
Name Do any of the persons aboard have Yes No Trip Expectations: Leave at From Expect to return by and no later than Any other pertinent info If not returned by	Age Add e a medical problem? o If yes, what? Going to (time) (time)	
Name Do any of the persons aboard haveYesNo Trip Expectations: Leave at From Expect to return by and no later than Any other pertinent info If not returned by call the COAST GUARD or (Loca	Age Add e a medical problem? o If yes, what? Going to (time) (time)	

by Dougherty \_

THIS PAGE WAS LEFT BLANK INTENTIONALLY



#### TROUBLESHOOTING GUIDE

PROBLEM	CAUSE AND SOLUTION
CONTROL SYSTEMS	
Hydraulic Steering is slow to respond & erratic.	<ul> <li>Steering system is low on fluid. Fill and bleed system.</li> <li>Steering system has air in it. Fill and bleed system.</li> <li>A component in the steering system is binding. Check and adjust or repair binding component.</li> <li>Engine steering spindle is binding. Grease spindle.</li> </ul>
The boat wanders and will not hold a course at cruise speeds.	<ul> <li>There could be air in the steering system. Fill &amp; bleed the system.</li> <li>The engine steering tab is corroded or out of adjustment. Replace or adjust steering tab.</li> <li>Engine steering spindle is binding. Grease spindle.</li> </ul>
An engine will not start with the shift control lever in neu- tral.	<ul> <li>The control cable is out of adjustment &amp; not activating the neutral safety cut out switch.</li> <li>The shift control lever is not in the neutral detent. Try moving the shift lever slightly.</li> <li>There is a loose wire on the neutral safety switch on the control. Inspect wires and repair loose connections.</li> <li>The starter or ignition switch is bad.</li> <li>There is a problem with the electronic control system at the helm control, module or at the engine. Have the system serviced by a qualified marine technician.</li> </ul>
PERFORMANCE PROBLEMS	
Boat is sluggish and has lost speed & RPM.	<ul> <li>The boat may be need to have marine growth cleaned from hull and running gear.</li> <li>Propellers may be damaged &amp; need repair.</li> <li>Weeds or line around the propellers. Clean propellers.</li> <li>Boat is overloaded. Reduce load.</li> <li>Check for excessive water in the bilge. Pump out bilge &amp; find &amp; correct the problem.</li> <li>The throttle adjustment has changed and the engine is not getting full throttle. Adjust the throttle cable.</li> <li>One of the throttle is not responding properly and the engine is not getting full throttle. Have the throttle control checked by a qualified marine technician.</li> </ul>
The boat vibrates at cruising speeds.	<ul> <li>Propellers may be damaged &amp; need repair.</li> <li>A propeller or propeller shaft is bent. Repair or replace damaged components.</li> <li>The running gear is fouled by marine growth or rope. Clean running gear.</li> <li>The engines are not trimmed properly. Trim engines.</li> </ul>

**Everglades**<sup>™</sup>

### **Troubleshooting Guide**

Troubleshooting Guide	<b>Everglades</b>
PROBLEM	CAUSE AND SOLUTION
ENGINE PROBLEMS	
An engine is running too hot.	<ul> <li>The engine raw water pick up strainer is clogged with marine growth. Clean pick up.</li> <li>The engine raw water pump impeller is worn or damaged. Repair the pump.</li> <li>The engine thermostat is faulty and needs to be replaced.</li> </ul>
An engine alternator is not charging properly.	<ul> <li>The battery cable is loose or corroded. Clean and tighten battery cables.</li> <li>The alternator is not charging and must be replaced.</li> <li>The battery is defective. Replace the battery.</li> </ul>
An engine suddenly will not operate over 2000 RPM.	<ul> <li>The engine emergency system has been activated. The on board computer has sensed a problem and has limited the RPM to protect the engine. Find &amp; correct the problem.</li> <li>The tachometer is bad and needs to be replaced.</li> <li>The oil tank on 2-cycle engines is low on oil. Fill the engine oil tank. Refer to the engine owner's manual.</li> <li>A throttle control is not responding properly. Have the throttle setting checked by a qualified technician.</li> </ul>
An engine is loosing RPM. The boat is not overloaded and the hull bottom and running gear are clean and in good condition.	<ul> <li>The engine may be having a problem with a sticky Antisiphon valve, located in the fuel line near the fuel tank, that is restricting the fuel flow. Remove &amp; clean or replace the Anti-siphon valve.</li> <li>The remote gasoline fuel filter could be dirty. Inspect and replace the fuel filter.</li> <li>The primary fuel filter on the engine may be dirty. Inspect and replace the fuel filter.</li> <li>The electronic engine control system on the engine is malfunctioning. Repair the engine control system.</li> <li>The fuel injection system on the engine is malfunctioning . Repair the fuel injection system.</li> </ul>



#### **Troubleshooting Guide**

# **Everglades**

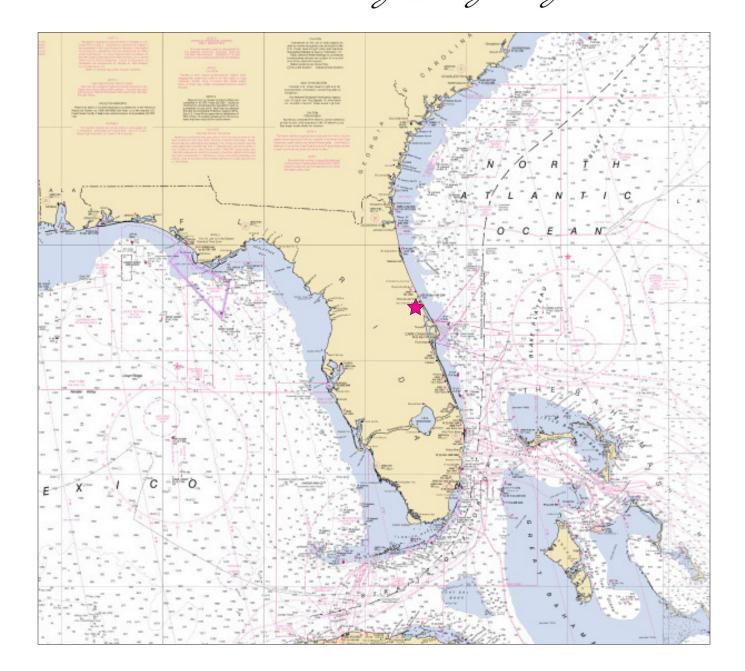
PROBLEM	CAUSE AND SOLUTION
ACCESSORY PROBLEMS	
The baitwell pump runs, but does not pump water.	<ul> <li>The strainer on the intake scoop is clogged preventing the water from getting to the pump. Put the boat in reverse to clean the strainer.</li> <li>There is an air lock in the system. Prime the system.</li> <li>The thru-hull valve is not open. Open valve.</li> </ul>
The fresh water pump runs, but will not pump water.	<ul> <li>The water tank is empty. Fill the tank.</li> <li>The intake hose is damaged and sucking air. Replace or repair the hose.</li> <li>The pump is defective. Repair or replace the pump.</li> </ul>
The fishbox pump out pump runs, but does not pump out the fishbox.	<ul> <li>The strainer in the fishbox is clogged. Clean the strainer.</li> <li>The pump has an air lock. Fill the fishbox half full of water, then turn the pump on and off several times to move the air out and prime the pump.</li> <li>The pump discharge line is clogged. Clean the discharge line.</li> </ul>
The fresh water pump fails to turn off after all outlets are closed.	<ul> <li>There is a leak in a pressure line or outlet. Repair the leak.</li> <li>There is an air leak in the intake line. Repair the air leak.</li> <li>The pressure switch is defective. Replace the pressure switch.</li> <li>The voltage to the pump is low. Check for corroded or loose wiring connections or low battery.</li> <li>The strainer is clogged. Clean strainer.</li> <li>The pump is defective. Repair or replace the pump.</li> </ul>
The washdown pump runs, but the pump will not pump water.	<ul> <li>The thru-hull valve is not open. Open valve.</li> <li>The in-line sea strainer for the pump is clogged. Clean the sea strainer.</li> </ul>
The washdown or fresh water pump fails to turn off after all outlets are closed.	<ul> <li>The intake hose is damaged and sucking air. Replace hose.</li> <li>The pump is defective. Repair or replace the pump.</li> <li>There is a leak in a pressure line or outlet. Repair the leak.</li> <li>There is an air leak in the intake line. Repair the air leak.</li> <li>The pressure switch is defective. Replace the pressure switch.</li> <li>The voltage to the pump is low. Check for corroded or loose wiring connections or low battery.</li> </ul>
Reduction in water flow from the bilge pump.	<ul> <li>The strainer is clogged. Clean strainer.</li> <li>The pump is defective. Repair or replace the pump.</li> <li>Impeller screen plugged with debris. Clean screen at the base of the pump.</li> <li>The discharge hose is pinched or clogged. Check discharge hose and clean or repair.</li> <li>Low voltage to the pump. Check the battery and wire connections.</li> </ul>

### **Troubleshooting Guide**

# **Everglades**<sup>™</sup>

PROBLEM	CAUSE AND SOLUTION
ACCESSORY PROBLEMS	
The automatic switch on the bilge pump raises but does not activate the pump .	<ul> <li>The circuit breaker or fuse for the automatic switch has tripped or blown. Reset the circuit breaker or replace the fuse.</li> <li>The battery is dead. Charge or replace the battery.</li> <li>The pump impeller is jammed by debris. Clean pump impeller housing.</li> <li>The wire connections in the bilge have corroded. Replace connectors and secure above the bilge waterline.</li> <li>The automatic switch is defective. Replace the switch.</li> <li>The pump is defective. Replace pump.</li> </ul>
The bilge pump will not run when the manual switch is activated.	<ul> <li>The circuit breaker supplying the switch has tripped. Reset the circuit breaker. Replace if defective.</li> <li>The battery switch is off. Turn on the battery switch.</li> <li>The pump impeller is jammed by debris. Clean pump impeller housing.</li> <li>The wire connections in the bilge have corroded. Replace connectors and secure above the bilge waterline.</li> <li>The switch is defective. Replace the switch.</li> <li>The pump is defective. Replace pump.</li> </ul>
Head will not flush.	• The holding tank is full. Pump out the holding tank
Excessive odor from marine head.	<ul> <li>Back pressure in the holding tank. Pump out holding tank and clean the vent and vent hose.</li> <li>No deodorizer in the holding tank. Add deodorizer to the holding tank each time it is pumped out.</li> <li>The waste in the tank is over two weeks old. Pump the holding tank if it has contained waste for two weeks or more.</li> </ul>
Holding tank will not empty.	<ul> <li>Holding tank vent is clogged. Clean the vent and vent hose.</li> <li>There is a vacuum leak in the hose from the holding tank to the deck pump out fitting. Tighten loose fittings or replace damaged hoses.</li> </ul>
The air conditioner runs for a short time & then cuts out.	<ul> <li>The intake scoop strainer for the raw water system is clogged with weeds or debris. Back down the boat to clear debris or clean the scoop strainer.</li> <li>The air conditioner pump sea strainer is clogged. Clean the strainer.</li> <li>The raw water supply thru hull valve is closed. Open the valve.</li> <li>The air conditioner raw water pump is not pumping and needs to be repaired or replaced.</li> </ul>





Everglades Boats 544 Air Park Road Edgewater, Florida 32132