Operations Manual

Gypsy Drifter 48' Ocean Alexander



Welcome Aboard!

Thank you for choosing Gypsy Drifter as your charter vessel. Please give her the respect and care she deserves while enjoying her many fine features. We will be more then happy to hear from you concerning suggestions to ensure your cruising satisfaction. Please read the following operations manual and the individual manuals aboard the boat that describe in detail the systems and accessories on the boat. Feel free to make recommendations for changes or additions (especially corrections) as your comments will ensure all information is understood and appropriate for all crews. The individual manuals can be found in port stateroom drawers. These manuals should be of assistance with troubleshooting if required. Please return manuals to the cabinet when finished.

Happy Cruising!

Anacortes Yacht Charters Service – 800-233-3004

Gary Griffiths, Owner and Checkout Captain - 425-280-4381

Table of Contents

About this Manual 4
Specifications
Engine & Marine Gear Controls
Electrical System
Engine Cooling System13
Fuel Systems
Fresh Water Systems

Electrical Accessories	16
General	
Engine Compartment Blowers	
Trim Tabs	
Navigation Light Switches	
Pilot House Controls	
Tachometer	
Oil Pressure	
Water Temperature	
Ammeter	
Washer and Dryer	
Cabin Heating	18
Entertainment	18
Television	10
Stereo	
	18
Stove	10
Refrigerator	
Icemaker	
Range Hood Exhaust Blower	
Garbage Disposal	
Heads/Showers	.19
Shower Sump Pumps	
Toilets	
Operation of Vessel and Check List	21
Safety Equipment	24
Important Reminders	25

About this Manual

Manual Objective and Limitations

This manual is intended to introduce you to Gypsy Drifter, its systems and features, allowing you to operate it with the confidence and self-assurance necessary to enjoy your cruising vacation to its fullest. It is not intended to replace a basic understanding of seamanship, including navigation skills, weather interpretation or boat handling. You are expected to have an understanding of these subjects obtained through other sources, including training, seminars, reading and perhaps most important, experience.

There is no way that a small manual like this one can answer every question or give you a solution to every circumstance, foreseen or unforeseen. If you have a question which limits your understanding or handling of this vessel, ask your checkout skipper or contact Anacortes Yacht Charters Service Department for details.

How the Manual is Organized

Each section defines its general purpose as shown on the front page. You will use the section containing checklists, most of all. You should have it available so that it can be used on a daily basis, even after you are familiar with the boat. Another copy of this operating checklist has been laminated and is stored in the inside back cover of the gray manual binder.

The section regarding Emergency Procedures is the most important, and you should read it, but hopefully you will never need it.

Read this section first to learn about this manual and the general details of your boat. The other sections will tell you most of what you need to know to enjoy your cruise to the fullest with safety and confidence.

SPECIFICATIONS

BOAT NAME:	GYPSY DRIFTER			10	
Hull Identification No.	OAX48109L899				
Owners Name					
Address					
Telephone No.					
Dealers Name					
Address	306 NAUTICAL DRIVE, STURGEON BAY, WI. 54235				
Telephone No.	(920) 743-3311				
Document No.				÷	
Delivery Date	DEC. 24, 1998				
Warranty Date	MAR. 23, 2000				
BOAT INFORMATION:					
Length48' 6"	Beam15'	6" Di	raft2's	9"	
Approximate Displacement_	36,000 LBS He	ight Above W	aterline		
Fuel Capacity		er Capacity _			
Holding Tank Capacity	*				
ENGINES:		-			
Manufacturer/HP					
Starboard Model No.		D O E L I			
Transmission Model/Maker_					
Port Model No.			Serial No.		
Transmission Model/Maker_					
Anti-Freeze Type/Manufactur					
Lube Oil Capacities - Engir					
Engine Lube Filter — First_	6			Margaret and	
- Secon		OR 1000FG x	254		
Fuel Oil Filter/Engine — Firs	-				
	ond				
Replacement Element Numb					
Transmission Oil Filters		4 SAE 15 W 40		ELLA	
Recommended Engine Lube		and the second se			
Recommended Transmission					
Recommended Fuel Oil Type					

1

		Manuals		
Engines 200/12				Hours/Months
Transmissions 400/24				
Fuel Systems 200/12				Hours/Months
GENERATOR(S):				
Manufacturer/Capacity	NORTH	ERN LIGHTS 12KW	MODEL: M843	3NK-12KW
Serial No	S/N: 843	2-19951C		
Anti-Freeze Type/Manufac	cturer			
Lube Oil Capacity			Filter	
Fuel Oil Filter - First	RACOR	500FG	Second	
Replacement Element Num				
Recommended Lube Oil	CD-4 SA	AE 15 W 40		
PROPELLER SHAFTS: AQU				
Diameter			Length	143-1/4"
Tapered				
Props: HUNG SHEN				
Diameter	28" x 4B	DAR = 0.70	Pitch	32"
	Kaununi	STBD= 44464H	A	
Standard Taper, Standard	Reyway	DODT- MARSH	A	
Standard Taper, Standard BOW THRUSTER: Manufactu			0.053	
BOW THRUSTER: Manufactu			0.053	
BOW THRUSTER: Manufactu BATTERIES:	G.N.B.			8D1000CCA
BOW THRUSTER: Manufactu BATTERIES: Main — Number	G.N.B.	POWER	0.053	8D1000CCA
BOW THRUSTER: Manufactu BATTERIES: Main — Number Voltage	G.N.B.	BATTERY X 2 EA	Туре	40000004
BOW THRUSTER: Manufactu BATTERIES: Main — Number Voltage Generator — Number	G.N.B. 12V G.N.B.	BATTERY X 2 EA		40000004
BOW THRUSTER: Manufactu BATTERIES: Main — Number Voltage Generator — Number Voltage	G.N.B. 12V G.N.B.	BATTERY X 2 EA	Туре	40000004
BOW THRUSTER: Manufactu BATTERIES: Main — Number Voltage Generator — Number Voltage PUMPS:	G.N.B. 12V G.N.B.	BATTERY X 2 EA	Туре	40000004
BOW THRUSTER: Manufactu BATTERIES: Main — Number Voltage Generator — Number Voltage PUMPS: Number	re <u>SIDE F</u> G.N.B. 12V G.N.B. 12V	POWER BATTERY x 2 EA BATTERY x 1EA 4	Туре	40000004
BOW THRUSTER: Manufactur BATTERIES: Main — Number Voltage Generator — Number Voltage PUMPS: Number Bilge Pump Manufacturer ar	re SIDE F G.N.B. 12V G.N.B. 12V	POWER BATTERY x 2 EA BATTERY x 1EA 4 RULE 2000	Type Type	4D900CCA
BOW THRUSTER: Manufactur BATTERIES: Main — Number Voltage Generator — Number Voltage Voltage PUMPS: Number Bilge Pump Manufacturer ar Part No	re SIDE F G.N.B. 12V G.N.B. 12V	POWER BATTERY x 2 EA BATTERY x 1EA 4 RULE 2000	Type Type	4D900CCA
BOW THRUSTER: Manufactur BATTERIES: Main — Number Voltage Generator — Number Voltage Voltage PUMPS: Number Bilge Pump Manufacturer ar Part No Number	re SIDE F G.N.B. 12V G.N.B. 12V	POWER BATTERY x 2 EA BATTERY x 1EA 4 RULE 2000	Type Type	4D900CCA
BOW THRUSTER: Manufactur BATTERIES: Main — Number Voltage Generator — Number Voltage Voltage PUMPS: Number Bilge Pump Manufacturer ar Part No Number	re SIDE F	POWER BATTERY x 2 EA BATTERY x 1EA 4 RULE 2000 1. RULE 3700	Type Type	4D900CCA
BOW THRUSTER: Manufactur BATTERIES: Main — Number Voltage Generator — Number Voltage Voltage PUMPS: Number Bilge Pump Manufacturer ar Part No, Number Sump Pump Manufacturer a	re SIDE F	POWER BATTERY x 2 EA BATTERY x 1EA 4 RULE 2000 1 RULE 3700	Type	4D900CCA
BOW THRUSTER: Manufactur BATTERIES: Main — Number Voltage Generator — Number Voltage Voltage PUMPS: Number Bilge Pump Manufacturer ar Part No Sump Pump Manufacturer a Part No	re SIDE F	POWER BATTERY X 2 EA BATTERY X 1EA 4 RULE 2000 1 RULE 3700	Type	4D900CCA

WASTE PUMP:	2092				
Manufacturer and Model					
Part No.					
SEAWATER PUMP:	00000 0/0	NODEL 404 0	004.40		
Manufacturer and Model	GROCO PJR-A MODEL; 401-0004-12 S/N: 0498				
Part No	5/N: 0498				
OTHER PUMPS:					
HYDRAULIC STEERING: Manufacturer	HYNAUTIC M	//S1200-42-2			
Helm Pump Model	H-42				
Slave Length and Model	K-3				
Hydraulic Fluid Type	SHELL MORI	INA ISO 10			
HEADS:	2 VACU-FLU	SH			
Number	2 VA001 L0	U.I.			
Number	SEALAND		Model	508	
Manufacturer	SEALAND		Model	508	
Manufacturer	SEALAND	,			
Manufacturer UTILITIES: (MANUFACTURE Refrigerator	SEALAND R AND MODEL) NORCOLD	DE561	S/N: 57568	7GS	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range	SEALAND R AND MODEL) NORCOLD ST-302	DE561 KENYON (220V)	S/N: 57568 S/N: 03729	17GS 172	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Icemaker	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE Q.E	DE561 KENYON (220V)	S/N: 57568	7GS 072 0404	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Icemaker Microwave	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E.	DE561 KENYON (220V) BI-98	, S/N: 57568 S/N: 03729 S/N: 98-31	7GS 072 0404	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Icemaker Microwave Trash Compactor	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E.	DE561 KENYON (220V) BI-98	, S/N: 57568 S/N: 03729 S/N: 98-31	97GS 972 0404 3024K	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Range Icemaker Microwave Microwave Trash Compactor Garbage Disposal	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E. G.E.	DE561 KENYON (220V) BI-98 JE1390GA	S/N: 57568 S/N: 03729 S/N: 98-31 S/N: MT90	97GS 972 0404 3024K	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Icemaker Microwave Microwave Trash Compactor Garbage Disposal Dishwasher	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E. G.E.	DE561 KENYON (220V) BI-98 JE1390GA GFC300Y	S/N: 57568 S/N: 03729 S/N: 98-31 S/N: MT90	97GS 972 0404 3024K 3847T	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Range Icemaker Microwave Mi	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E. G.E. SPLENDIDE	DE561 KENYON (220V) BI-98 JE1390GA GFC300Y WD802M	S/N: 57568 S/N: 03729 S/N: 98-31 S/N: MT90 S/N: AT326 S/N: 29735	97GS 972 0404 3024K 3847T 0467	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Icemaker Microwave Microwave Trash Compactor Garbage Disposal Dishwasher	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E. G.E. SPLENDIDE	DE561 KENYON (220V) BI-98 JE1390GA GFC300Y WD802M	S/N: 57568 S/N: 03729 S/N: 98-31 S/N: MT90 S/N: AT326 S/N: 29735	97GS 972 0404 3024K 3847T 0467	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Range Range Range Microwave Microwave Microwave Microwave Standard Compactor Garbage Disposal Garbage Disposal Dishwasher Washer & Dryer Vacuum System Cooker Hood	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E. G.E. SPLENDIDE	DE561 KENYON (220V) BI-98 JE1390GA GFC300Y WD802M	S/N: 57568 S/N: 03729 S/N: 98-31 S/N: MT90 S/N: AT326 S/N: 29735	97GS 972 0404 3024K 3847T 0467	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Range Range Range Microwave Microwave Microwave Sange Garbage Disposal Garbage Disposal Garbage Disposal Dishwasher Washer & Dryer Vacuum System Cooker Hood WATER HEATER:	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E. G.E. SPLENDIDE	DE561 KENYON (220V) BI-98 JE1390GA GFC300Y WD802M	S/N: 57568 S/N: 03729 S/N: 98-31 S/N: MT90 S/N: AT326 S/N: 29735	97GS 172 0404 3024K 5847T 0467	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Range Range Range Microwave Microwave Microwave Microwave Microwave Microwave Microwave Microwave Microwave Manufacturer and Model	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E. G.E. SPLENDIDE RARITAN 120 WAC	DE561 KENYON (220V) BI-98 JE1390GA GFC300Y WD802M	S/N: 57568 S/N: 03729 S/N: 98-31 S/N: MT90 S/N: AT326 S/N: 29735	97GS 172 0404 3024K 5847T 0467	
Manufacturer UTILITIES: (MANUFACTURE Refrigerator Range Range Range Range Microwave Microwave Microwave Microwave Standard Compactor Garbage Disposal Garbage Disposal Dishwasher Washer & Dryer Vacuum System Cooker Hood	SEALAND R AND MODEL) NORCOLD ST-302 U-LINE G.E. G.E. SPLENDIDE RARITAN 120 WAC	DE561 KENYON (220V) BI-98 JE1390GA GFC300Y WD802M	S/N: 57568 S/N: 03729 S/N: 98-31 S/N: MT90 S/N: AT326 S/N: 29735	97GS 172 0404 3024K 5847T 0467	

	S/N: 3332747 /MI12603 MODEL: 200-1260-03 AC 10.5AMP OUTPUT: 12VDC 60	DAMP		
Voltage INPUT: 120 V//		DAMP		
-				
TRIM TARS.				
Manufacturer and Model BENNETT V35	51			
Size of Planes 12" x 12"				
WINDLASS:				
Manufacturer and ModelMAXWELL NIL	SSON VWC2200			
Voltage12V				
Chain Size				
TANKS				
Fuel Tank - Material ALUMINUM ALI	LOY 5086-H32, 3/16"T			
Capacity 300 GALS	Number	2		
Water Tank - Material STAINLESS ST				
Capacity90 GALS				
Holding Tank — Material F.R.P.				
	Number			
	STBD S/N: 32091			
ENGINE CONTROL SYSTEM				
Manufacturer MMC 585CE	PORT S/N: 32092			
HORN				
Manufacturer NINETY-NINE				
HEATER				
Manufacturer CADET				
Model	Number_2			
AIR CONDITIONER Manufacturer CRUISAIR				
	- million - management - management - management			
	FX16 (115V) S/N: J980012, FX30C1-P (230V) S/N: J980010			
Model FX16 (115V) S/N FX12 (115V) S/N		0010		
Blower Innunder	4 EBO16C (230V) x 2EA S/N: D950009, J980014			
WIOUGI	S/N: J980002, EBO12 (115V) S/N: J9	80003		
Pump Number 2	511. 5550002, EBO12 (1154), 514. 55	00000		
-	V) S/N: J980024, PMA1000 (115V) S/N	H0904		

.

Engine & Marine Gear Controls

This boat is equipped with MMC controls (single lever control). The lever control box has a button on lower left corner which must be activated when starting each engine.

Engine Stop Buttons are located on each side of the panel. They are used to stop the engines after throttle controls are in idle position by the electromechanically shutting off the fuel supply.

Starting and Stopping the Engines

The following procedures must be used when starting engines;

- 1. Turn key to starting position (clockwise)
- 2. Press button on lever control box (red light will come on for that engine).
- 3. Turn key to engage starter (engine will start).
- 4. Follow same procedure for the second engine.

The following procedures must be used to stop engines;

- 1. Press stop button (Alarm will sound).
- 2. Turn key counter clockwise to the OFF position.

Note: Engine will keep running if key is turned off first. To correct situation, key must be turned to on

Position, then follow steps 1 and 2.

Start and stop engines at the lower helm station. When transferring controls to flybridge, the button on lever control box on flybridge must be activated. Red lights will come on.

Bow Thruster

Main control switch is located on starboard side in master stateroom. Control toggle switch is located on flybridge, both "on" buttons must be pressed simultaneously to activate.

Controls and Instrumentation

The flybridge control panel contains all controls, gauges, and switches necessary for the control of the boat. Included on the panel are: engine controls, marine gear controls, gauges, help and compass switches.

Helm

The steering system installed in this vessel is hydraulic. Full control of the rudder is available at any time from either station. The system consists of four basic components; Helm unit, reservoir, relief valve and the cylinder. These components are connected by copper tubing or high pressure synthetic tubing.

Fluid is added to the system at the reservoir where the systems head pressure (30psi) and fluid reserve are maintained. Also, the reservoir contains two sintered bronze filter to clean the fluid before entering the system. Use MIL-05606 Aircraft Hydraulic fluid, Texaco #15, Shell Tellus 15 (ISO-Tellus10) or Chevron EO-Machine oil 10. Light viscosity oils are recommended, heavier oils may be used but will cause harder steering.

Note: There is an air pump mounted next to the reservoir.

For details of purging the system of air, please refer to the installation and service manual in equipment manual.

Bilge Pump Switches

The electric bilge pumps are controlled from the control panel. Power to the switches comes from the 12 volt section of the electrical panel. The individual "Bilge Pump" breakers must be "on" for operation, if "auto" switch is installed even though the main or master breaker is off.

Alarm System

The bell warns the engine operator, if the engine coolant overheats or the oil pressure drops below the oil pressure switch setting. The water temperature switch is normally open. Should the engine coolant exceed 200-205°F (93-95°C), the water temperature switch will close the electrical circuit and sound the alarm bell.

The oil pressure drops below the setting of the oil pressure switch, the switch will close and cause the bell to ring. The bell will continue to ring until the engine operator turns the alarm switch off.

The oil pressure switch is the component which cause the alarm to sound when an engine is switched on but not running.

If the alarm sounds when an engine is running, the engine should be stopped at once and the cause investigated.

Note: the engines will stop if overheating or low oil pressure exists, including the generator.

Navigation Equipment

Garmin GPS, Radar, Auto Pilot and Depth Sounder at both stations. AIS is available to identify other boats which are equipped with AIS and they will be able to identify you.

Note: There is an emergency button on the VHF that when engaged will identify the Gypsy Drifter and its location to the U.S. Coast Guard. They will respond with a call on the VHF (channel 16).

Electrical Systems

General

This vessel has two complete breaker protected electrical systems installed;

A 110/220 volt AC Ships Service System; and a 12 volt DC System. The 110/220 volt AC system obtains their power from sperate hull side shore power connections or from the AC generator. Whereas the 12 volt DC system obtains its power from the installed batteries. The batteries are kept charged by engine alternators or the 110/220 volt AC powered charger. The main shore power connection is on the stern (starboard side). This shore power cord is operated by cord is operated by a Glendinning power real system.

The electrical circuits are controlled by circuit breakers on the electrical panel.

Batteries

Batteries are installed in the engine compartment. Each engine is normally started by its respective battery. On the electrical panel there is a battery condition meter to check the condition of the individual batteries. Battery disconnect switches for the batteries are located in the engine room. The batteries are kept charged by the engine alternators or the 110/220 volt AC power battery charger.

Generator

The generator is located in the engine compartment. The remote start-stop switch and pre-heat switch is located on the wall, left of the steering wheel. Power for starting the generator comes from a separate battery and fuel comes from the fuel manifold. The output of the generator feeds the 110/220 volt ships service section of the electrical panel. For more information on the generator see the generators opters manual.

Note: Never turn off the generator with the rotator switch, use the toggle switch only.

The generator can be started and stopped by either the switch on the wall or the switch on the generator itself. If the generator shuts down from either low oil pressure or high water temperature, the cause must be corrected and the reset button on the generator pressed before restarting.

Note: Normal cause for overhearing is a plugged raw water filter strainer.

DC System

The main DC electrical system is 12 volt with negative ground. Two or four batteries are used for engine starting and general service. Once or two batteries for generator, if it is installed. All circuits are protected by miniature circuit breakers. A voltage indicator and an ampere gauge show the condition of the system. The batteries are kept charged by engine alternators or battery charger.

AC System

One, two or four power inlets with circuit breakers and power inlet selector switch bring the 120V or 240V shore power for onboard use. If generator is installed, it provides AC power, when the shore power option is not possible.

One or two multi-position switches are mounted on the AC panel to select either shore power or generator power for service system. The rotary switch on this boat has four positions; Fwd Power, Off, Aft Power and Generator.

All circuits are protected by miniature circuit breakers. A voltage gauge and an ampere gauge are installed to show the condition of the system.

Electrical Panel

The electrical panel is designed to put electrical service in one package. The panel is located near the lower helm station and contains all the switches, meters and pilot lights necessary to control the electrical systems aboard.

The 110/220 volt ships service system section of the panel contains a source selector switch which enables selecting either shore power or generator power. It is a rotary switch to prevent selecting both sources at the same time. To take on shore power have the source on either "Generator" or "Off" until shore line power is connected. NOTICE: To insure that the shore line service is of the same polarity as that of the yachts electrical system, check the polarity and see if the amber light comes on, then polarity is reversed. Turn the individual and master circuit breakers on the panel off and then turn the source selector switch to "Shore". Secure generator as soon as you are on shore power. Turn on master and individual breakers as desired. Check the "Input Voltage" voltmeter as low voltage will damage certain motors and will reduce the efficiency of all electrical appliances. To shift generator

power, first turn the individual and master switches off, then turn the source selector witch to "Generator". The generator will now be feeding the system (providing, of course that the generator is running). Disconnect shoreline and turn the master and individual switches back on as desired.

On the 12 volt section of the electrical panel there is a master circuit breaker switch and individual circuit breaker switches to the various appliances.

Note: Always turn the rotary switch to the off position when connecting or disconnecting shore power or starting/stopping the generator.

Battery Charger

The battery charger is installed in the engine compartment. The battery charger has the following features: automatic line voltage correction from 70-140 volts AC: automatic shutoff when the engines are started; completely automatic current limiting; and automatic complete shutoff when the batteries are fully charged. The nominal input is 110 volts (70-140 volts acceptable) 60 cycles form the electrical panel or 50 cycle system with input of 220 volts (200-280 volts acceptable). When energized in automatic with engines off, the battery charger monitors the state of charge of the battery that is providing 12 volt ships service, and when sufficiently discharged starts charging the lower battery automatically. When the lower battery is up to the state of charge of the higher battery both batteries are then charged until they are both fully charged at which time the charger shuts off automatically.

Ground System

This yacht is a negative ground boat. All DC equipment installed and the batteries have been grounded to a common ground terminating at the boats ground plates which go through the hull. This is done to reduce the danger of electrical shock. Also terminating at the boats ground plates is a bonding system to minimize electrolysis, consisting of copper strips running fore and aft on the inboard stringers to which wire jumpers are run to the various pieces of metallic equipment. This vessel is used in saltwater therefore please be aware of the possibility of galvanic action and /or electrolysis in the hull metallic underwater parts.

Engine Cooling Water System

To dissipate the heat generated by the engine, and maintain a normal engine operating temperature of 165-195°F (75-91°C). A typical cooling system is required. The engines are cooled by fresh water which is, in turn, cooled by salt water. The salt water used for this purpose is drawn in by the raw

water pump and is pumped through a series of heat exchangers before it passes through the exhaust line water jacket and into the exhaust hose at the standpipe muffler.

The heat exchangers are used for cooling the engine lubricating oil, engine fresh water and the transmission fluid. The heat exchanger for engine fresh water contains zinc pencils to protect it against electrolytic action. This component should be checked for condition every 100 hours.

Under freezing conditions, the fresh water system must contain an anti-freeze solution. When the boat is to be laid up or left unattended for long periods of time the engine water should be drained and the train plugs should be removed from the exhaust line.

Fuel System

Diesel: A fuel manifold with selector valves is installed in the engine compartment on the bulkhead. The manifold is connected to both fuel tanks and engines with supply and return lines enabling either of both engines to be supplied from either fuel tank and return to either fuel tank. The generator is supplied from and returns to one of the fuel tanks. CAUTION: Always return fuel to the supplying tank to prevent overflowing of any one tank. The fuel tanks are vented by tubing from the tanks which go through the hull side.

Fueling

The fuel filling connections are located on the side decks. When filling tanks, always shut down engines, generator, motors and electrical circuits. Be sure that the nozzle of the fuel hose is touching the metal deck plate to ground static electricity. Watch the overboard vents, and when fuel starts overflowing, shut off nozzle. For easy tracing, all copper piping is covered with different coded color.

Fuel Gauge

There is a direct reading fuel gauge located on the side of each fuel tank. The gauges indicate approximate level of fuel in the tanks. Please insure that these gauges are normally turned off to prevent accidental spillage.

Note: To read fuel level in sight gauge, valve must be turned on.

When an engine has run out of fuel, there is a definite procedure to follow for restarting the engine.

- 1. Insure that the shut off valve on all empty tanks are closed. Fill the tank with the recommended grade of fuel. The fuel will enter the filters under gravity and will drive the air out of the top.
- 2. If only the minimum fuel is available, remove the fuel strainer and fuel filter shell and element from their cover and fill the shell with fuel oil.

3. Install the shell and element to start engine.

Fresh Water System

This vessel has an automatic hot and cold water pressure system installed. The system consists of a water tank, a water pressure pump, a water heater, check valves and relief valve.

Note: If the water tanks are run dry and airlock will form at the pressure pump. To remedy this situation the hose connection to the inlet side of the pump mist be loosened and the pump turned on to expel the air.

Water Tank

The fresh water storage tank is a stainless steel welded tank. CAUTION: When filling water tank do not use the full amount of city water pressure. In many cases, it is possible to use more pressure and volume then the vent line can discharge thereby causing the tank to rupture. It is suggested that you do not leave the hose unattended when filling the tank.

Water Pressure Pump

The pump is normally located in the engine compartment. It is equipped with a combination pressure/dry tank shut-off switch with reset lever. The pump obtains power from the 12 volt section of the electrical panel where the "master" and "fresh water pump" switches must be on for operation.

Water Pressure Gauge

There is a water pressure gauge in the cockpit. 1" of pressure in each tank equals 6 gallons of water combined. Always fill to max -> 32" + per side (will not overflow, but will sound full and stop increasing on gauge)

If you hit empty the pump will need priming.

- 1. Turn off pump @ 12 volt panel "fresh water pump"
- 2. Fill tanks completely to 32"+
- 3. Open Kitchen trap
- 4. Turn on pump
- 5. In Engine room pump will be butting, loosen intake seal
- 6. When water starts squirting, close intake seal tightly
- 7. If success, buzzing stops and water works as expected again.

Water Heater

The water heater is located in the engine compartment and is electrically operated from the 110/220 volt ships service section of the electrical panel which must be energized with the "Master" and "Water Heater" switches on for operation, or from the heater exchanger operated by the engine. (if installed). NEVER TURN THE WATER HEATER ON UNLESS THERE IS WATER IN IT, AS IT MIGHT RUIN THE HEATING ELEMENT.

Electrical Accessories

General

This vessel is fitted with the finest electrical accessories available. Many of the accessories are standard equipment such as; cooktop or electric stove with oven, electric refrigerator, exhaust blowers, electric bilge pumps, electric shower sump pimps, and engine compartment exhaust blower. Optional electrical accessories include; air conditioning system, ice maker and stereo system. Note: For normal operating conditions the most practical generator and shore power devices have been installed. However, if all standard and optional AC equipment is operated simultaneously, the combined total power requirement can exceed power availability.

Engine Compartment Blowers

The engine compartment blowers are located below the salon deck. Each blower takes a suction from the engine compartment by means of a flexible hose. It is powered by 12 volts from the 12 volt section of the electrical panel where the 'Master" and "Engine Room" blower circuit breaker must be on for operation. The blower should be run per the "Caution" notice on the blower.

Trim Tabs

There are two trim tabs hinged to the bottom of the transom. They are used to provide better fore and aft trim control of the boat at all forward speeds and are positioned electro-hydraulically by a switch at the control station(s). Power for operation of the trim tabs comes from the 12 volt section of the electrical panel where the "Master and "Trim Tabs" circuit breaker must be on.

Navigation Light Switches

There are four light switches on the control panel. One each for the following: Navigation Lights, Instrument Lights, Compass Light, and Combination Anchor/Range Light. These lights are controlled from the 12 volt section of the electrical panel where the "Master" and "Nav." Breakers must be "on" for operation.

Pilot House Controls

The pilot house control console contains the same equipment as the flybridge panel and operates in the same manner. The throttles and clutches are the same, as are all the gauges and the helm. They are key ignition switches, engine starter switches, trim tab switches, a horn button, all of which operate the same as the switches on the flybridge control panel.

Tachometer

The tachometers indicate the revolutions per minute of the engines (RPM) and are a good indicators of engine loading and performance. Cruising RPM varies with the loading conditions and type of engine fitted. Please consult your dealer for his recommendations. Note: Best cruising RPM is 2,200 - 2,300.

Oil Pressure

The oil pressure gauge indicates lubricating oil pressure or mechanical malfunction in the lubricating oil system. Normal operating pressure varies with the conditions and type of engine. Observe and record pressures when engine is new to serve as a guide for indication of progressive engine wear.

Water Temperature

A water temperature of 165° to 195°F (75° to 91°C) is best assurance that cylinder liners are heated to the proper temperature to support combustion. An engine should be allowed to warm up gradually and should not be run at full cruising RPM until normal operating temperature has been reached.

Ammeter

An ammeter shows the current flow to and from the battery. As engine continues to operate, the ammeter should show a decline in charge rate to the battery. If lights or other electrical equipment

are connected into the circuit, the ammeter will show discharge when these items are operating and engine speed is reduced.

Washer and Dryer

Instructions are located near by.

Cabin Heating

There are two 110V heaters, one is in the salon and one in the bunk room. Desired temperature can be set with or without the fan.

Entertainment

Television

There are two operating TV's. One in the salon and one in the master stateroom. They receive information via Intellian Satellite Antenna. There is also a DVD player in the salon.

Note: to operate the TV salon outlet switch and satellite TV switch on the electric control panel must be turned to the on position.

Stereo System

Fusion AM/FM Stereo in the salon. The stereo system consists of stereo tape player and three pairs of speakers with individual speaker "volume" switches. Power for operation of the system comes from the 12 volt section of the electrical panel where the "Master" and circuit breaker must be on for operation.

Galley

Stove

The electric stove top installed has 3 burners powered by generator or shore power from the AC section of the electrical panel. For the stove to operate there must be AC power to the panel and the "master" and "stove" switches must be on.

Microwave-Convection oven instructions for operating are located in drawer opposite microwave.

Refrigerator

The refrigerator-freezer is powered by 110V (or 220V) from the AC section of the electrical panel or 12 volt from the DC electrical panel where the "Master" and "Refrigerator" circuit breaker must be on for operation.

Icemaker

The icemaker is powered by 110v (or 220v) and is supplied water from the pressurized fresh water system. To operate use the "on-off" switch located behind the grill on the icemaker must be "on" and there must be AC power to the electrical panel where the "Master" and circuit breaker must be "on" as well.

Range Hood Exhaust Blower

Over the stove there is an exhaust blower that discharges overboard. Power for the blower is 12 volts from the electrical panel where the switches must be on for operation.

Heads/Showers

Shower Sump Pumps

Basically there is one shower sump pimp for two shower rooms. The pumps are powered by 12 volts from the electrical panel where the "master" and appropriate circuit breaker must be on. The pump is operated by a switch located on the main panel.

Note: Water from both showers run to and open retention pool under the fwd cabin sole. The pump is located in the pool and when the float switch is activated it will pump water overboard.

Toilets

There are two heads/toilets installed. They are powered by 12 volt from the 12 volt section of the electrical panel. The inlet and outlet valves are located under cabin sole. To operate, the inlet valve must be open and the "Master" and individual toilet circuit breaker on the electrical panel must be in the "on" position. To flush the toilet hold the foot pedal down for 3 seconds. To add water to the bowl, lift the foot pedal. Do not wad up the toilet paper and use as little as possible. The waste can be

drained to outboard directly or to holding tank installed onboard. Note: When the holding tank is full please empty it first, before you want to drain the waste to it.

- 1. Holding tank can be pumped out at a dock pump out station. Insert pump out nozzle in deck place located on starboard side.
- 2. To drain holding tank, turn on macerator pump switch on electrical panel. It should empty in about 10 minutes when full (watch holding tank gauge).

Operation of Vessel

Pre-Start

Engine access is obtained by lifting the hatch covers in the main salon, or through the access panels in the aft stateroom. This access is for checking oil, transmission fluid and coolant levels.

Check Oil

Dipstick marks are separated from full to add by two quarts. When the dipstick reads 'add', two quarts are needed. Halfway between would require one quart. Diesel engines are particularly sensitive to overfilling. Please be careful.

Visually Inspect

Perform a visual inspection of all belts, hoses, mounts, sea strainer, fuel filters and coolant overflow tanks.

Coolant

Coolant should be visible in the overflow tanks. If not, you can check coolant tank by removing the cap and if you feel fluid with your finger its fine. After checking and you cannot feel coolant in the expansion tank, add coolant to reach the cold line.

Start

Be sure all engines transmission are in neutral. The engines will not start unless you are securely in neutral.

Start the port engine first. See engine and Marine Controls section of this manual.

Visually check overboard exhaust for water flow.

Warm engine not more than 5 minutes before maneuvering. Run at least 15 minutes at slow speeds (1500rpm) to allow engine to come to operating temperature (180°F) and then apply power as required.

If an engine warning alarm sounds it could be due to low oil pressure or high water temperature... normal readings are 40-70 psig for oil pressure and 180° F for water temperature.

Operating Checklist

First thing each day:

- Check engine oil and coolant
- Check under-engine oil pads. Okay?
- Check fuel tank levels in each tank on the tank watch gauges
- Check holding tank
- Turn off anchor light if illuminated

Starting Engines:

- All lines clear of propellers and on deck
- Items running on AC evaluated. Start engines as described under Engine and Marine Gear Controls section of this manual
- Check for cooling water coming from exhausts

Before Leaving the Dock:

- 3-4 minute engine warm up is all that should be needed
- Master electrical panel Check that the SHORE POWER switch is in the "OFF" position
- Shore Power cord unplugged, stowed on board
- Lines removed and stowed as appropriate
- Fenders hauled aboard and stowed
- ALL dinghy, deck gear and other lines stowed or secured properly
- Doors and hatches closed and secured as appropriate

Underway:

- The Helmsperson is to be on lookout watch at all times.
- Keep RPM's under 1000 until engine warms up to 180°; RPM's should never to exceed 2500
- Frequently balance RPM's of engines and watch temperature gauges
- Be AWARE of boats wake effects on others, slow down or steer clear
- Adjust Trim Tabs as required ("Bow Down")

Approaching Dock:

- Fenders out on appropriate side
- Bow line OUTISDE stanchions and bloused around toward midships

- Engines dead slow, wheel centered for engine-only maneuvering
- Crew/Mate ready to secure stern first (in most circumstances)

Arriving at Dock:

- Secure vessel with lines, including spring lines
- Connect Shore Power cord
- Electric Panel Shore Power switch "on" to appropriate power location
- Shore power confirmed on meters
- Electric use monitored for current capacity of shore facilities

Mooring Buoy:

Skipper puts starboard end of swim step, with mate on it, next to buoy. Mate loops 20' or so line (preferably old one from rope locker) through buoy ring. Mate holds two ends together, walks up side of boat to bow of boat. With buoy held close to bow, line secured to each bow cleat.

Mooring at Anchor:

Anchor windlass switch in "ON" position on main electrical panel. The engines must be running when using windlass. Anchor is lowered from pulpit while boat is backed up slowly away from anchor. When desired rode length out (4:1 or 5:1 scope) windless is stopped. Engines reversed for 'count of five" until chain pulls up virtually straight. Note: The boat is not held in reverse against a taught anchor chain!

Overnight in Marina:

Shore Power "ON" / Charger "ON"

Overnight at Anchor or Buoy:

Anchor light "ON"

DC electrical items all "OFF" including radios, extra lights, ect.

Upon Arising:

If at anchor or buoy run generator as necessary to charge house batteries. Run engines when operating windlass to retrieve anchor.

Safety Equipment

Fire Extinguishers

There are 4 Fire Extinguishers are available on board.

- 1. Mounted by the lower helm station
- 2. Located in the fwd cabin on port side closet
- 3. Located in port side guest room closet
- 4. Located in the galley

Life Jackets

There are 8 adult and 2 child life jackets stored under the fly-bridge seating area.

Throw Ring

A throw ring is mounted on the rail on upper aft deck.

Flares

Hand held flares and flare gun are stored under aft salon seat.

First Aid Kit

A First Aid Kit is stored in the port side head.

Flashlights

One on the window shelf adjacent to the lower helm. One on the Flybridge.

No Smoking

Gypsy Drifter is a smoke free vessel. Thank you for not smoking or vaping on board.

Important Reminders

- Under the law, YOU are in charge of the boat. You are expected to be familiar with good operating practices, no matter what you may have heard or read! If you are insecure with your knowledge about some procedures check the manuals, Chapmans Piloting book, or call Anacortes Yacht Charters service team for help. In an emergency or any unsafe situation please contact the US Coast Guard (USCG) using the VHF radio channel 16 or call 911.
- 2. Under the law, you MUST report to customs when crossing international boundary. This is not treated casually by the authorities, and there are serious fines imposed on those who cannot prove they "checked in". Fill in the customs log.
- 3. Under the law, the master of a documented vessel is required to KEEP A LOG of the ship's use. This is not just a "diary" of what you did and who you saw! Should any adverse event occur, this log is treated with great credence by the courts, as long as it is "contemporaneous", i.e., filled out at the time of the event. Keep the ship's log!
- 4. Under the law, radio operations must follow proper procedures and be on correct channels. See the section on Radio Procedures in your charter's guide for a reminder of these if you are unsure!
- 5. Under the provided "Charter Insurance" that covers this boat, you cannot operate before sunrise or after sunset, nor in "restricted visibility" or in "gale force or higher" winds. If you have an accident and are not within these parameters of the insurance policy, you are liable for all damages and repair costs.
- 6. Under the law, YOU cannot discharge untreated sewage from the head system in U.S. waters. This boat is equipped with one holding tank system. Use them in U.S. waters! In addition, be sure the overboard valves are secured with a "wire tie" if in a no-discharge zone (east of Hiram Chittenden Locks) in case the vessel is boarded for inspection by the Coast Guard.
- 7. Logs and debris are a hazard in our waterways! You must ALWAYS keep a lookout. If you hit a log, it is YOUR fault. Don't run fast into the sunset or sunrise as sparkles on the water hide flotsam. Debris will be pushed away from the hull when running slowly and avoid damage to the running gear. A careful lookout will avoid costly damage to the props and or shafts and worst of all potentially ruin a well planned and deserved vacation. If you do run fast, always operate the vessel from the upper helm.
- 8. If the fisherman are out, watch for nets! Nets are marked, often poorly, by a red ball a the end. The problem is, sometimes the balls are barely floating, and you often don't see the net until its too late. Here's the best way to avoid a net; Slow down, and steer directly toward the fishing boat. When you get nearer, you should see the line of floats that support the top edge od the net – that is, if the net is out.
- 9. You are responsible for your own wake. Please be courteous, and slow down especially in narrow passages and in harbors. Look behind your boat and imagine crossing your own wake in a small boat. How would you like it? Imagine having your lunch dumped off the table by a passing boat like yours!