

WELCOME ABOARD!

Thank you for choosing “SUNSET CHASER” a 1979 Grand Banks 42’ Europa for your Holiday. We are sure you will enjoy cruising the lovely islands of the Pacific Northwest.

General Description:



The vessel is a USCG documented Vessel, # 923301 with a LWL of 42.7, Beam of 13’7” and draft of 4’2”. The WA State Parks decal # is 200830827 and the customs Decal # is 8549815.

BOAT OPERATIONS

Prior to settling in for your holiday you need to familiarize yourself and your guest with the operating systems and safety features of SUNSET CHASER.

Engine Start Procedures

The twin Ford Lehman 6 cylinders, 120 hp diesel engines located in the engine room beneath the salon are cooled by raw water and fresh water systems. Before starting the engines, **perform a daily W.O.B.B.S. Inspection** (Water, Oil, Bilges, Belts, and Sea Strainers). Access to the engine room is through the removable floor panel at the left of the lower helm station.

Ensure GEARSHIFTS (black knobs) are in ‘neutral’, or the engines cannot be started because of the “neutral lockout”. THROTTLES (red knobs) should be run up and down and then brought almost back to the idle position. Once the controls are adjusted, open the electrical panel located to the left of the lower helm station and turn on the four toggle switches located at the upper right hand section of the panel (see photo below).

Once all four switches have been turned on you will hear the engine alarm which is your signal to start each engine separately. Find the two silver buttons labeled START and depress the PORT ENGINE FIRST. After the engine has engaged, depress the STARBOARD button. Leave the four toggle switches on during engine operation. **DO NOT TURN OFF UNTIL YOU FIRST COMPLETE THE SHUT DOWN PROCEDURE.** Check the exhaust at the swim platform to ensure that you have water flowing from each engine. **IF NOT, SHUT DOWN AND INVESTIGATE BEFORE PROCEEDING.**

Electrical Panel (UPPER) at the main Helm:



Note -- If oil pressure is low, shut down engine, and inspect engine compartment and look for possible cause (for example, loss of oil.) Caution -- If an engine is overheating or there is lack of raw water expelled in the engine exhaust, stop the engine immediately. Recheck the raw water-cooling system to ensure the seacock is 'open' (handle in-line with valve). Next, check the raw water strainer for debris. Remove the strainer, clean, re-assemble, and reopen the raw water intake valve (seacock). Restart the engine and re-check water flow from the exhaust. If water is not flowing properly, the RAW WATER PUMP may need to be serviced. Seek help.

Engine Shut Down

Before shutting down, allow the engines 'idle' for about 5 minutes to cool them gradually and uniformly. The time engaged in preparing to dock the boat is usually sufficient. Ensure each GEARSHIFT is in the 'neutral' position and each THROTTLE is in the 'idle' position. Turn off engines by depressing the stop buttons at the electric panel picture above. After turn off the engines, you can then turn off the four toggle switches identified during the start procedure.

Getting Underway

DISCONNECT the shore power cord (see 110-Volt next page). Close the PORTHOLES, WINDOWS, and FORWARD HATCH. Turn on your VHF and electronics circuits located at the electrical control panel. ASSIGN crew members their various positions. Once outside the marina, idle the engines while crew brings in fenders and lines. When maneuvering out or into a slip, we recommend leaving the throttles at idle speed while alternating the port and starboard gear levers one at a time. Avoid using excess throttle except when wind conditions require more thrust.

Cruising

All close quarters maneuvering should always take place at the Fly bridge helm.

Engage the GEARSHIFTS. Ensure the throttles are in the 'idle' position before engaging the gearshifts to avoid transmission damage. Cruising speed is a maximum of about 2200 RPMS. If you run at 1800 RPMS you will cruise at 8-9 knots and use only 8 gallons of diesel per hour. Your speed will vary depending upon the weight and load and weather conditions.

Note -- Avoid higher engine speeds as it causes higher engine temperature, possible damage, and higher fuel consumption

Docking

During docking, use the FLYBRIDGE HELM for greater visibility to the stern. Have your crew make ready the lines and fenders and give clear instructions on how you will be docking. Often times your crew will need to step off from the swim step with the stern line. Another crew member will need to be at the bow or mid-ships to hand over the next lines. It is advisable to have a crew member reading with a spare fender in hand to move about the deck and assist with additional fender protection as may be needed during the docking procedures. Again we emphasize placing the throttles at idle and alternate the transmissions for great control during this maneuver.

Fueling Up

MAKE SURE YOU HAVE THE RIGHT FUEL! DIESEL! DIESEL! DIESEL! MAKE SURE IT IS GOING INTO THE RIGHT DECK FILL! DOUBLE-CHECK

There are two fuel tanks; one on each side of the vessel with filler caps located on the walkways. Use the DECK FITTING KEY located in the upper drawer behind the lower helm station.

Before pumping, have an oil/fuel sorbs handy to soak up spilled fuel. You should have a rough idea of the number of gallons you will need by the engine hour indicator. Also periodically have someone turn on the key to watch the fuel gauge.

Place the DIESEL nozzle into the tank opening, pump slowly and evenly, and note the sound of the fuel flow. Pumping too fast may not allow enough time for air to escape, which may result in spouting from the tank opening. As the tank fills, the sound will rise in pitch or gurgle. Pay attention to the TANK OVERFLOW VENT on the outside of the hull near the tank opening. The sound may indicate that the tank is nearly full. Top off carefully, and be prepared to catch spilled fuel. Spillage may result in a nasty fine from law enforcement.

Replace each tank cap. Turn on blower before starting engines. *Caution -- Clean up splatter and spillage immediately for environmental and health reasons. Wash hands with soap and water thoroughly*

BOATS ELECTRICAL

The electrical system is divided into two distribution panels: 12-volt DC and 110-volt AC.

The 12 Volt DC and 110 Volt AC controls are located to the left of the main helm station. The upper panel is for DC switching and the lower panel is for AC and the onboard generator controls. When not connected to shore power or operating the generator, the batteries are providing all power.

Most breaker controls are labeled by colored dots. Green signifies “usually on”. Red is “usually off” Blue dot are water pressure or water-related like pumps. Yellow signifies electronics or items to use cautiously. No dots are breakers signify irregular use or use with discretion

110-Volt AC System

SHORE POWER supports all AC equipment and receptacles on board, as well as the battery chargers. To connect to shore power, plug the 30 amp POWER CORD into the boat and then into the dock receptacle. Check the power rating/plug size of the nearest dock receptacle (that is 50 amp, 30 amp, 20 amp, or 15 amp). The electrical adapters are located in the forward lazarette on the aft deck.

At the ELECTRICAL PANEL, flip the SHORE CIRCUIT BREAKER on. Check for reverse polarity. Then turn on appropriate breakers for battery charger, refrigeration, water heater and electric stove. Watch your volt meter for load. If the load exceeds voltage, you will pop your breaker. If this occurs, wait to turn on one of your systems (i.e. water heater) until your use of volts drop.

Generator

You are equipped with a Northern Lights 5 k generator located in the after section of the engine room. Fuel for the generator is provided by your starboard fuel tank.

To start your GENERATOR, first check that your generator's fluids are topped off and the raw water intake is open. The generator controls are located at the lower AC panel and in the engine room. First pre-heat the generator for about 20 seconds. Then while still pre-heating turn the switch to start. Hold the switch in that position while the generator catches. (about 5-10 seconds). The generator is equipped with an air/water exhaust separator that makes for quiet operation.

After generator is running, turn your AC distribution switch to generator (or ship). Then turn on AC systems as you would on shore power one system at a time.

To turn the generator off, first take off the load by turning off AC breakers. Then turn off main AC distribution switch. Lastly kill the generator by switching generator switch to "off" until it dies.

House (12 volt) System

There 12 volt systems consist of 4 start batteries, 4 house batteries and an isolated generator start battery. The house batteries also manage the 12 volt electric windlass. When operating the windless, make certain that the engine is running as they will charge your batteries as does the generator and the 110 volt system when plugged into shore power. All lighting, water pumps, electronics and the Vacu-flush system are 12 volts.

House Battery Bank & Switch

The HOUSE BATTERY BANK provides power for all DC systems, except the engines and two automatic bilge pumps. When disconnected from shore power, all 12-volt devices drain the house battery. Use devices as needed. The DC voltmeter on the DC panel can be switched between Port, Starboard, and House Battery banks to measure charging or resting battery voltages.

When a battery bank is being charged, the voltage will read from about 13.1 volts to 14.4 volts depending upon state-of-charge of the battery bank. When the battery bank is at rest, (that is, not being charged), the voltmeter can give a rough indication of the state-of-charge of the battery bank.

All batteries except the generator battery are charged by the engine ALTERNATORS while underway. The engine/house batteries are charged by the BATTERY CHARGER when connected to shore power. Ensure the Battery Charger circuit breakers at the electrical panel are ON. The GENERATOR will also charge the batteries

Voltage (Wet Cell Battery)	Battery State
12.65 volts	100%
12.47 volts	75%
12.25 volts	50%
11.95 volts	25%
11.70 volts	0%

Battery Parallel Switch

Each ENGINE BATTERY is connected to its corresponding engine. However, should one engine battery be insufficiently charged to start its engine, the other engine battery may be momentarily connected to provide a boost. Turn the BATTERY PARALLEL SWITCH located at the lower step to the forward berths Turn off after the engines start up.

SANITATION SYSTEM

Marine Toilet

It is important that every member of the crew be informed on the proper use of the MARINE TOILET. The valves, openings, and pumps are small and may clog easily. If the toilet clogs, it is YOUR RESPONSIBILITY!

Always pump the head for children, so you can make sure nothing foreign is being flushed.

Your vessel is equipped with a Vacu-flush 12 volt marine sanitation device. The system is simple, efficient and sanitary. The process for clearing the bowl requires activating the electrical circuit switch located in the head; make certain that the house FW pump is on; and depress the foot lever located on the lower side of the bowl unit for approximately two seconds and then

Marine Toilet (continued)

release. The system utilizes fresh water from your water tank and uses approximately .7 quarts per flush. Each cycle moves the affluent to the vessels holding tank located beneath the sole of the engine room. The capacity of the holding tank is 30 gallons.

Caution – *Never put paper towels, tampons, Kleenex, sanitary napkins, household toilet paper, or food into the marine toilet. Use only the special dissolving marine toilet tissue provided by AYC.*

Holding Tank

The sanitation HOLDING TANK holds approximately 30 gallons. Be aware of the rate of waste production. (about 1 gallon per flush) With an overfilled tank, it is possible to break a hose, clog a vent, or burst the tank. The result will be indescribable catastrophe and an EXPENSIVE FIX to you. Empty the tank EVERY OTHER DAY to avoid this problem.

The holding tank is emptied in one of two ways:

#1 At the Marine Pump-Out Station, remove the WASTE CAP located to starboard . Insert the pump-out nozzle into the waste opening. Double-check your deck fitting! Turn on pump and open valve located on handle. When pumping is finished, close lever on handle and turn off pump. Remove from deck fitting.

If there is a fresh water hose on the dock, rinse the tank by adding 2 minutes of water into tank. Then resume pumping of the tank to leave the tank rinsed for the next charter. This also eliminates head odors.

#2 the tank's contents can be discharged with the on board vessel electric MACERATOR only in Canadian waters. The switch is located at the DC panel circuit board and is identified as TOILET TANK. Do not turn on the pump until first checking to confirm that the thru hull for the overboard pump is in the open position. This is located to port in the engine room and labeled as such.

WATER SYSTEM

Fresh Water Tank(s)

There are two steel FRESH WATER TANKS that hold a total of 245 gallons. The tanks are located in the aft lazarette. To refill the tank, remove the WATER CAP(S) located in the aft deck lazarette Avoid flushing debris from the deck into the tank opening. DO NOT fill water and diesel at the same time!

Fresh Water Pressure Pump

The WATER PRESSURE PUMP is located in the engine room on the port side after of the portside engine. Activate pump at the DC panel by turning on the breaker. If the water pump continues to run, you are either out of water or might have an air lock and need to bleed the

system by opening up a faucet. If you run out of water SHUT OFF YOUR HOT WATER HEATER on the AC panel. Serious damage can occur!

Hot Water Tank

The HOT WATER HEATER has a 10 gallon capacity tank. Hot water is available when connected to shore power or by the heat exchanger from the port engine when underway. Additionally, the fresh water may be heated through the diesel heating system by activating the DHW switch located to the aft starboard side of the salon just forward of the aft refrigerator.. To use on shore power, flip on the water heater circuit breaker on the AC electrical panel. Do not use the water heater if the water tank level is very low. The water heater is located in the engine room on the port side outboard of the port engine.

Shower

Before taking a SHOWER, make sure water pressure and shower sump breakers are on. Take only very short “boat” showers (turning off water between soaping up and rinsing). To keep shower tidy wipe down the shower stall and floor. Check for accumulation of hair in the shower and sink drains. Ensure that the faucets and nozzle are completely off after use.

A pressured FRESH WATER WASHDOWN is available from a hose located on the port side aft of the salon on the aft deck This system is part of the house water system so be certain that the water pump for the fresh water is on at the DC panel.

GALLEY

Stove/oven

You have an electric stove and oven aboard. To operate your cook top or oven you will need to be connected to a 30 Amp 120AC shore power or by running your generator.

Refrigerator

The REFRIGERATOR is dual voltage (12-volt and 110-volt power). It will automatically use 110-volt power when the shore power is connected; otherwise, it will operate on 12-volt power. Monitor the use of the refrigerator when the engines are not charging the 12-volt battery system. The local power switch is located below the front door. It can be turned down to the lowest position when anchored or moored or turned off when turning in for the night.

HEATING SYSTEM

Cabin Heat (A BLUE JET-HURRICANE MODEL DIESEL SYSTEM)

BEFORE ACTIVATING THE HOUSE HEATING SYSTEM, MAKE CERTAIN THAT THERE ARE NOT FENDERS OR DOCK LINES COVERING THE EXHAUST PORT LOCATED ON THE STARBOARD SIDE JUST AFT OF MIDSHIP.. Do not block this opening when operating the furnace. Heat will damage fiberglass or rubber.

Cabin Heat (continued)

The thermostat and control switches (labeled DHW and ER) are located on the salon refrigerator cabinet to starboard. To activate, turn the thermostat control down to the lowest temperature and then turn on the system with the small black toggle switch. Allow 15 minutes for the system to heat up before adjusting the thermostat to the desired temperature. You may want to turn the system off for the night by turning the thermostat down to the lowest temperature or by turning off the entire system.

The system may also be used to heat your hot water while at anchor or not accessible to shore power. While the heating system is on, simply pull the toggle labeled DHW. It will take approximated 30 minutes to heat the water in your water tank.

ELECTRONICS

All electronic manuals are located under the settee seat in the salon. MAKE CEERTAIN THE THE ELECTRONICS CIRCUIT BREAKER LOCATED AT THE LOWER AC PANEL IS TURN ON AS IS THE RADAR, NAVCOM CIRCUITS ON THE UPPER DC PANEL. The auto pilot is disengaged and is not to be used.

VHF Radio

There two VHF RADIOS. The first is located at the lower helm while the second is located on the flybridge.. Make sure the ELECTRONICS CIRCUIT breaker is on located at the lower AC Panel to the left of the lower helm. Always monitor channel 16 while underway.

Depth Sounder

There are two DEPTH SOUNDERS, one **at the lower helm-** and the other at the flybridge. To activate both DEPTH SOUNDERS, press the switch bridge instrument panel.. Set the scale, shallow alarm, and deep alarm as desired. The sounder should provide reliable readings in shallow waters. If in doubt, switch it off, then turn it back on to reset sounder. If your reading is blinking, it is a FALSE reading. False readings can occur in depths of more then 200 feet or in areas of string currents or tides. *Remember to ALWAYS consult your charts for depth!*

Radar (A Ratheon R20X) located at the lower helm

To turn on press the STB/OFF button just once.The system will enter a count-down mode for approximately 2 minutes and then enter STANDBY Mode.. To activate, press the STB/TX button once. To turn off, press and hold POWER button about 3 seconds. Remember you are not allowed to travel in FOG or in serious wind conditions..

Global Positioning System (GPS) A GARMIN 210 model

A fixed mount GPS is located at the lower helm for your use. This system is not a substitute for paper charts and should not be relied upon SOLELY for navigation purposes. Ascertain that your breaker is on and then press the red color 'on/off/light' button to activate functions. Refer to the manual normally found under the settee seat in the salon.

Note -- GPS is considered a navigation aid. Do not rely on it. Compasses, charts, and dividers are the tools to plot position, course, and speed.

ENTERTAINMENT SYSTEMS

AM/FM Stereo Radio

The JVC brand stereo/CD unit is located to port in the aft salon under the electric coffee pot. It operates like a normal car radio. Make certain that the circuit breaker labeled STEREO is turned on at the DC Panel.

TV/DVD is a Poloroid 17 inch flat panel

A TV/DVD is located atop the aft Refrigerator in the main salon.

ANCHORING

The primary WORKING ANCHOR is 44 lb CQR and is attached to 150 ft of chain rode that passes through the deck from the ANCHOR LOCKER. The locker can be accessed through the forward master cabin. If there is an anchor keeper, release it.

The WINDLASS POWER circuit breaker SWITCH is located at the lower step to the forward cabin. At the bow, a foot switch allows for deployment and retrieval of the anchor. By gently tapping on the 'down' foot control to lower the anchor. If necessary, guide the anchor over the anchor roller to prevent binding on the pulpit.

Let out sufficient ANCHOR RODE (chain and nylon line) before setting the anchor. Colored markers are placed every ---feet on the chain and nylon rode, indicated amount of rode. If the anchorage is crowded put down at least a 3 to 1 scope (60 feet for 20 feet of water), back the anchor in with a short burst from the engine. Then let out additional scope dependent upon conditions.

Before raising the anchor, ALWAYS start the engines as it uses large amounts of power. Turn 'on' the WINDLASS SWITCH and as the boat moves toward the anchor, press the 'up' control to take up slack line. Give the windlass short rests as you are pulling it up. Place yourself in position to guide the anchor onto the roller. As the anchor rises, be careful not to allow it to swing against the hull. Wash it down if you have a wash down pump before it goes into anchor locker.

REMINDER: When the task is complete Turn 'off' the WINDLASS POWER SWITCH.

A SPARE 22 lb Danforth ANCHOR and spare rode is normally stowed in the portside lazarette at the aft deck.

Mooring Cans

The State Park Sticker on your vessel allows you to pick up the MOORING CANS in the parks for free. You only need to register at the kiosk usually located at the heads of the docks. Mooring cans have a metal triangle at the top upon which is a metal ring. The metal ring is attached to the chain which secures your boat. IT IS VERY HEAVY. The strongest member of your crew should be picked for this job.

Come up to the CAN into the wind as you would for anchoring. Have crew members on the bow, one with a boat hook and one with a mooring line secured like a bow line. As you are coming slowly up to the can have the crew holding the boat hook point at the can with the hook so the skipper always knows where it is. Hook the can and bring the ring up to the boat to allow the second crew to thread the ring with the line. Release the hold with the boat hook. If your mooring line is led out the starboard chock bring the end of the line back through the port side. You will essentially create a bridle with about 10 feet of slack from the chalk to the can.

BARBECUE

The BARBECUE and MOUNTING BRACKET are stowed on the fly bridge

Attach a PROPANE BOTTLE to the REGULATOR attached. Carefully light the unit, preferably with a long-stem butane lighter. The barbecue generates a lot of heat and cooks hot and fast.

*Note: Propane bottles are not stocked by AYC. You will need to purchase one if extras are not found on board. Caution -- For safety reasons, do not store an opened propane bottle within the salon or engine compartment. Chances are these will leak slightly once opened and propane gas could settle into low spaces. **Store these bottles in the cockpit cabinet.** Ensure gasoline and flammable materials are not near the barbecue.*

DINGHY & OUTBOARD MOTOR

Your 10ft DINGHY with a 9 hp engine is stored on the aft fly bridge. It has a capacity of about 400 pounds (motor, equipment, and ---- people).

To deploy the dinghy use the electric davit system. The control plug and handle is located in the port side fly bridge seat. Make certain that your engine is running and the circuit breaker located at the lower step to the forward cabins is turned on. The dinghy is equipped with a harness that must be connected to the davit cable before deployment.

Before deploying or raising the dinghy, make certain that a tether line is attached to the bow and stern for safety and control. Lower and raise the dinghy over the port side only being careful not to come in contact with the aft cabin sides.

Coast Guard regulations state that any child 14 and under must wear a life jacket in a dinghy. It is a good idea for EVERYONE to follow this rule.

CRABBING & FISHING

Always check the fishing and crabbing requirements before you leave on your cruise. You will need a license. Many areas are CLOSED to crabbing and fishing on certain months.

CRAB AWAY FROM THE BOAT! Lines can get wrapped around props. Fish-flavored cat food with the pop-up ringed lids work the best for a nice neat way to bait the ring. After 15-20 minutes, retrieve the crab line and ring quickly. Measure the crabs using the CRAB MEASURING GAUGE normally located **in the aft deck lazarette..** Keep the male crabs of proper size (usually 6 ¼ inches across the carapace). Boil crabs about 12 minutes to cook.

After using, wash equipment thoroughly with fresh water (available from the cockpit shower faucet). *Note -- Please do not store wet rings and gear inside the boat.*

OTHER: Safety & Bilge Pumps

SAFETY should be paramount in your daily cruising. A MAN OVERBOARD DRILL should be discussed and perhaps even practiced with a life jacket. Remember you lifejackets are stowed **on the fly bridge.** A few should always be out and ready. Your flares and safety equipment are located in the next to the bottom drawer just aft of the lower helm.

SUNSET CHASER is equipped with an AUTOMATIC BILGE PUMP. The master switch is located on the electrical panel. Normally, the switch will be left in the AUTO position. You may occasionally hear the pump operate due to condensation and water from the shaft log accumulating in the bilge.

The vessels engine spares and belts, impellers, duck-bills, extra dock lines, pumps and extra fluids are located in the aft deck forward locker.

THRU-HULL LOCATIONS

(See Attached Photo)



