Wandering Tattler

(A medium sized shorebird, always found near saltwater)

Operating Manual

Wandering Tattler

Welcome Aboard!

Thank you for choosing the "Wandering Tattler" for your vacation in the Pacific Northwest. The vessel is named after a medium sized shorebird that after breeding in Alaska spends the rest of the year on that most interesting of habits; the saltwater, rocky shoreline.
This manual will help you become familiar with the vessel. If you have questions about the vessel and operation or about places to visit, please do not hesitate to ask the AYC staff

No smoking, please.

Wandering Tattler is a 2002 37' Nordic Tug powered by a Cummins 330 hp diesel engine.

Specifications

Length Overall	39'2"
Beam	12'11"
Draft	4'
Bridge clearance	19'
Displacement	21,500 lbs.
Fuel Capacity	350 gal.
Water Capacity	140 gal.
Holding Tank	45 gal.
Engine Oil	Delo 400 15W40
Transmission Oil	Delo 100 30W
Generator Oil	Delo 400 30W

Instrumentation

Ritchie Helmsman binnacle mounted, lighted magnetic steering compass
Ray Marine 631 Chart plotter with charts from Olympia Washington to the North end of Vancouver Island
Ray Marine RL80 Radar with 48" open array
Ray Marine ST 60 Tridata Instrument with depth sounder, knot meter, and log functions.
Raytheon ST7001 Autopilot with ST600R remote
Ray Marine rudder angle indicator.
ICOM VHF

Wandering Tattler is also equipped with:

FloScan fuel monitoring system
TankTender Diesel/Water gauges
Lofrans Series electric anchor windlass
5.0 KW Generator
Bow thruster
Stern thruster
Xantrex Inverter
AM/FM/CD Player
Microwave DVD Player-Toaster – Electric Coffee Pot – Avon 9' RIB
Dinghy with
3.3 HP Mercury
Small toolkit port step locker, large toolbox in engine compartment

Table of Contents

Engine

The Engine/Owner's Manuals (large, red notebooks) are located on the shelf in the main cabin.

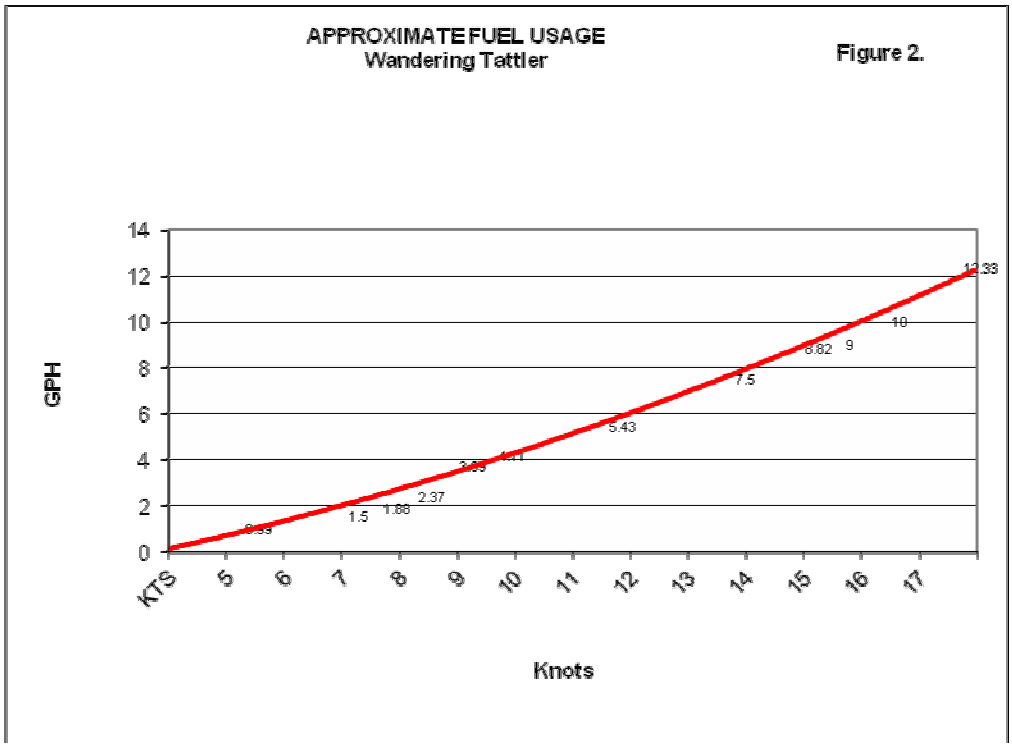
Wandering Tattler is powered by a single Cummins 330 hp diesel engine. The engine may be operated anywhere in the range of 1500 to 2200 rpm. Approximate speed and fuel usage at various rpm are graphed in Figures 1. and 2.

Fuel Monitor/Filling Instructions

USE ONLY DIESEL

Fuel usage for the main engine is monitored by the FloScan instrument. There are two toggle switches just to the right of the horn button (Picture #1). The right hand toggle is labeled Fuel Port and Stbd. If the switch is in the Stbd position the gallons indicator will flash and reset to zero. It is recommended that this is done at the start of the trip. The switch to the left of Fuel Port Stbd, in the up/forward position will show MPG on the gauge. When the switch is in the down/aft position the gauge will show gallons per hour (GPH) being used.

The fuel tanks capacity is 350 gallons of diesel #2. The fill inlets are aft of the each pilothouse door. The key for the filler caps (Picture #2) and the "NO-SPILL" container (Picture #3)are in the pilothouse starboard step locker. The "NO-SPILL" container should be held against the fuel vent while fueling, since the hull shape prevents the suction cups from holding the container in place. Place the DIESEL nozzle into the tank opening and pump slowly, filling too fast may not allow enough time for air to escape, which may result in fuel spouting from the vent opening. Note the sound of the fuel flow, as the tank fills the sound will rise in pitch or gurgle. Top off carefully, and be prepared to catch spilled fuel. The tanks are filled separately. **Do not drag the fuel hose through the pilothouse.** The fuel level can be checked at the TankTender gauge at the helm, or at the sight gauges on the forward end of the tanks, under the cabin sole in the main cabin. When checking fuel level at the sight gauges, open valves at top and bottom of gauges. Close valves after checking fuel level.



Pre-start Engine Room Inspection

Remember your "WOBBS" every morning: Water (Coolant), Oil, Bilges (Inspect and Pump-out), Belts and Sea Strainer.

a) Check engine coolant level. The overflow container is located forward of the engine. The container should be ¼ to ½ full when engine is cold. Extra coolant is in engine room, portside.

b) Check oil level. The dipstick is located on the port side of the engine. Oil level should read between "low" and "full". If level is below "low" mark add oil (Delo 15-40W, in engine room portside.) There is ½ of a one quart oil container in a zip lock that should be used as a funnel (Picture # 4)***Do not overfill***

c) Check under engine for oil and fluids. Do a visual inspection of hoses, fuel lines, Racor filters (for water), and black dust near the serpentine belt that drives the raw water pump and the alternator.

d) Check that raw water-cooling seacock is open (engine room, port side, forward) and check raw water filter. Shine a flashlight through the glass bowl to see debris. If strainer is fouled, close seacock, open top of strainer (brass key in pilothouse, starboard side step locker, (Picture #5), remove strainer basket and clean. After replacing strainer, hand tighten filter cover, and ***open the seacock.***

e) Turn battery switch at base of DC panel to "on" position. This must be done *before* starting engine. ***Never turn battery switch while engine is running! Severe damage to the alternator will result.***

e) If the main engine battery is low there is a battery paralleling switch at the bottom of the DC panel that can be used

Engine starting:

Follow this checklist which is also at the helm station

Engine Battery on

(Do not switch batteries after engine has started)

Electronics/Instruments – On

Horn - On

Autopilot – On

Bow/Stern Thruster – On

Autopilot – Standby

Rudder centered

Ignition – on

Start engine

Check Exhaust for water

The vessel is equipped with a series of alarms at the helm station, including "overheating", and "low oil pressure". The "low oil pressure" alarm will sound when you turn on the key. This is normal. Oil pressure should be 50-60PSI. With a cold start there will be some white exhaust smoke. This is also normal.

With gearshift in neutral do not advance throttle. Turn key to on and press starter. After engine starts low oil pressure will continue to sound for several seconds until oil pressure reaches operating level. ***If alarm continues to sound after 10 seconds turn off engine immediately or severe damage may result***. Do not crank the engine for more than 30 seconds. Wait 2 minutes before restart. If necessary there is a battery-paralleling switch at the bottom of the D.C. panel.

After starting:

Check exhaust for water flow, water should be coming out of outlet at aft starboard quarter. If no water is flowing from exhaust, shut down engine and check raw water-cooling system. A prolonged engine warm-up is not necessary. Even when the engine is cold, a warm-up of 2-3 minutes is adequate. When the engine is cold there will be white exhaust smoke, this is normal.

Keep below 1400 rpm until engine temperature reaches at least 140 degrees Fahrenheit.

Pause gearshift momentarily in neutral when shifting between forward and reverse to prevent damage to transmission.

Operations Underway:

The vessel has a left hand propeller, which means that the stern will move to starboard when backing down.

Note:

The bow and stern thrusters draw huge currents and generate significant heat. An internal thermal cutoff switch prevents the motor from burning out, but you should avoid ever getting near that point. Use the thrusters in short bursts of a few seconds with longer off periods in between. Primary maneuvering comes from the transmission throttle and rudder. The thrusters are not a substitute for the correct use of these tools.

Once away from dock or anchorage turn off bow/stern thruster at steering station.
Set radar to active state by momentarily pressing "power" key.
The Cummins 330 may be operated at any setting between 1500 and 2200 rpm. Obviously fuel economy is better at lower rpm, but one of the advantages of the Nordic Tug is her ability to cruise at 11 to 13 kts. when desired. (See Plates 1. and 2. for graphs of approximate speeds and fuel consumption at varying rpm.)

Do not exceed 2200 rpm. Also do not idle the engine (800 rpm) more than five or ten minutes at a time. If you are running the engine to charge batteries or to run the microwave for an extended period, set throttle to 1000 to 1100 rpm. To advance throttle in neutral, pull hub of throttle outwards (toward starboard) then advance throttle. To re-engage transmission set throttle to idle.

Engine Shut-Down

Before shutting down, allow the engine to run at idle for several minutes. The time spent putting out fenders, dock lines, and motoring in the marina will be sufficient.

Electrical System

110 AC Shore/Generator/Inverter Power:

There is a selector switch at the top of the AC panel (starboard side of pilothouse/main cabin companionway) to determine the source of power. The top selector switch is used for shore power from the 30 AMP shore power inlet on the starboard side of the vessel aft of the pilothouse door. The second selector switch selects power when the generator is available and the shore power 1 selector switch is off.

The vessel is equipped with a 30 amp. 110 volt AC system for connection to a shore side power facility.

When connecting the vessel to shore power the following sequence must be followed for safety:

a) Make sure master AC breaker switch is ***off.***

b) Attach 30-amp cord to boat fitting first then attach to shore power fitting.

c) Turn on shore power breaker.

d) Turn on AC breaker at the AC panel

Caution; using hot water heater, microwave, and refrigerator at the same time will trip the main circuit breaker.

A 2000-watt inverter also provides 110 volts AC power. 6 golf cart batteries, power the 110 outlets. The panel on the starboard side of the pilothouse/forward cabin companionway controls the inverter. Pressing the pressure sensitive label on the control panel labeled “inverter” turns on the inverter. The microwave oven, coffeepot, toaster and TV can be run off of the inverter for short periods. **The inverter should never run electric space heaters or hot water heater, since the batteries would be immediately drained.** A control panel at the helm station controls the inverter. The AC/DC power usage has to be monitored carefully as the battery capacity is not capable of sustaining large loads for any period of time. Monitor the battery voltage often when not on shore power or using the generator. The house/inverter batteries can be monitored by the LEDs on the panel; empty, mid, and full. When the house/inverter batteries are low either the generator or shore power can charge them, with the charger circuit breaker on. When connected to shore power or running the generator the inverter should be off. An example is being connected to shore power with a space heater operating. If the shore power goes off, the space heater would run off the inverter and drain the batteries.

The generator controls are at the top of the AC panel. Before starting the generator check the oil, coolant level, and raw water strainer. **Check the seacock; the exhaust is underwater and cannot be visibly checked for water flow.** The generator will start without preheat; however the generator should be run without load for the first three minutes.

12 Volt DC System:

There are 5 battery banks on the vessel;

- The main engine start battery is a 4-D located forward of the generator.
- The generator start battery is located immediately forward of the generator.
- The bow thruster/windlass battery is a 4-D, located under the forward cabin sole.
- The inverter/house batteries are six 6 volt batteries in series/parallel, located on the starboard side of the engine room
- The stern thruster battery is a maintenance free battery located on the port side of the aft lazarette

The state of the batteries can be monitored with the top switch on the DC breaker panel on the left side of the helm station.

Most 12 VDC equipment is controlled through this panel including fore and aft cabin lighting, upper and lower electronics, navigation and anchor lights, autopilot, 12 volt refrigeration, pressure water system, Vacu-Flush head, shower sump pump, pilothouse defrosters, engine powered heating system, and raw water wash down pump.

The Espar diesel furnace is wired independent of DC breaker panel and is controlled by the thermostat in the main cabin (Picture #5). The fan motor draws a significant amount of power and should not be left on overnight unless the vessel is connected to shore power

When at anchor, monitor battery levels carefully. Remember that the refrigerator is the greatest single drain on the batteries. It is a good idea to turn off the refrigerator at the 12 VDC power panel when anchored overnight. The refrigerator will stay cold through the night.

Fresh Water System:

The water fill is on the starboard side aft on deck.

The fresh water master switch on the DC Panel controls the fresh water pressure system pump.

The water level in the 140-gallon tank can be monitored at the "Tank Tender" gauge at the helm station. It is recommended that the tank be topped off whenever fresh water is available.

Hot water is provided by a 6-gallon capacity combination 110/120 VAC/ heat exchanger water heater.

When connected to shore power or using the generator the hot water is produced by 110VAC. The hot water heater master switch (AC Panel) should be on.

Underway the water is heated through a heat exchanger on the engine. The hot water heater master switch (AC Panel) should be off.

When at anchor water can be heated by using the generator. At all times be careful when using hot water but especially after engine heating—**water is extremely hot!**

Galley and Cabin

Oven and Stove:

The vessel has a Force Ten propane fueled Oven/Stove. The main propane shutoff is at the tank in the aft step locker. There is also an emergency shutoff/detector in the salon at the base of the stove (Picture #7). To enable the propane system, first turn on valve at tank, and then turn on "LPG Control" on the DC panel followed by the switch to the right of the range (Picture #8). Alarm will sound while system charges. If alarm doesn't shut off after a few minutes, turn off at salon panel then reset making sure that fresh air circulates around panel. If alarm continues to sound ***do not attempt to light stove.*** Although the emergency panel shuts down the propane system if it detects a leak there may still be enough propane in the lines to create a problem if area is not thoroughly aired out.

After propane alarm shuts off, stove and/or oven may be lit. The Force 10 is equipped with an internal ignition system for both the surface burners and the oven and broiler burners. To use the ignition system:

a.) Turn the desired burner valve to the start position;

b.) While pushing knob in, press small starter button on the right hand of stove panel;

c.) After burner lights hold burner knob in for a few seconds then set flame to desired height.

Note that valve works the opposite of a standard household stove valve. What would be considered the "high" position on a home stove is "low" on the Force 10. The highest burner setting is next to the start position.

Refrigerator:

The refrigerator/freezer operates on both AC and DC. The system must be manually switched at the AC/DC Panels in the pilothouse. Only use AC when connected to shore power or running the generator.

DC power. Turn off the refrigerator at night when not connected to shore power. The refrigerator is a major draw on electrical power and will rapidly discharge batteries. The unit will hold the cold well when the doors are not being opened and shut.

Cabin Heat:

The vessel has an Espar Diesel Furnace system controlled by a thermostat mounted on in the main cabin, (Picture #) The rocker switch turns the furnace on and off. When first turning on the furnace it will make two attempts to light. If for some reason it doesn't light it will automatically shut down. If this happens, turn furnace off at the switch and wait five minutes then restart.

Note: The fan motor draws a significant amount of power and should not be left on overnight unless on shore power

When underway, there is a secondary heating system provided by the engine's cooling system. To use this system turn on accessory switch at DC Panel in the pilothouse. Fan settings are controlled by a toggle switch at the helm station.

Head

Shower and Sink:

The shower drains into a gray water tank. To use the shower, turn on the D C breaker labeled "Holding Tank Pump". A float switch in the holding tank turns on the pump and the gray water will be pumped overboard as the tank fills.

The sink drains overboard with no pumping required.

Toilet:

The head is a Vacu-Flush system. It uses a vacuum pump and a small amount of fresh water to clear the bowl and the lines. The head empties into a holding tank that can be emptied either at a shore side pump out station (preferred) or, if in appropriate Canadian waters, overboard through a macerator.

a) To add water to the toilet bowl pull up on the foot lever.

b) To flush hold foot lever down for the count of three.

c) Do not flush unless water pressure pump is on, vacuum pressure has built up and the red control light is off.

d) The holding tank level gauge is also located below the sink in the head. Empty holding tank before red light indicates a full tank.

e) It is not uncommon when using the head to turn off the rocker switch with ones elbow. If the head does not flush, check this first.

To empty holding tank:

Shore side:

Holding tank outlet is located on deck, next to pilothouse port side. Do not confuse it with the nearby diesel fill—they are clearly marked.
Follow instructions at shore side pump out station.

Offshore:

In appropriate Canadian waters the holding tank may be emptied overboard through the macerator system.

a.) The macerator seacock is located under the cabin sole in the main cabin and is secured with a zip tie. To open the seacock, cut the tie and replace after the seacock has been closed. The ties and side cutters are in a black canvas tool kit in the port step locker in the pilothouse (Picture #9)
b.) Turn on "Macerator Pump" breaker switch on DC panel
c.) Use "Macerator" toggle switch at helm station to pump out holding tank.

d.) Close seacock, reattach zip tie.

The U.S. Coast Guard requires holding tank overboard discharge systems to be secured whenever vessel is inside the three-mile limit.

After emptying holding tank add four ounces of head chemical (Sealand chemical is located in the cabinet under the head sink) into bowl and flush.

Use only supplied marine grade toilet paper in head. Human waste, marine grade toilet paper, and head chemical are the only things that can be put in the head. Do not throw any foreign substances, cleaning chemicals or cleaning material into head

Dinghy and Outboard

The dinghy is raised and lowered by using the boom and self-tailing winches. The port lifeline should be lowered during the raising and lowering process.

Electronics:

The vessel is equipped with Chart plotter, radar, VHF, Autopilot, and a Tridata system integrating a depth sounder, knot meter and log functions.

Operating manuals for all electronics are located in the locker under the port pilothouse seat, (Picture #10)Vinyl coated quick reference cards for the radar, the ST7000 Autopilot, the ST60 Tridata unit, and the VHF, are located in the tray on the chart table.

Brief basic operating instructions follow.

Chart plotter:

a) Turn on by pressing power key once. Press again to access backlight.

b) Turn off by pressing and holding power key

c) Radar can be displayed on Chart plotter screen.

Radar:

a) Press “Power” key to initialize radar.

b) Radar will warm up for about 70 seconds then go into Standby mode.

c) To activate, press “Power” key again.

d) To turn on backlight depress the “Multi” key, select a slider with the appropriate “soft key” at the bottom of the screen, then adjust slider level using the track pad.

e) To reverse screen to a negative image for night viewing, depress “Screen” soft key, then toggle “Targets” to “Night” with the appropriate soft key.

f) To turn off radar press and hold “Power” key. Message will be displayed giving number of seconds until system turns off. When screen blanks out release “Power” key.

Tridata:

Turns on from DC Panel in pilothouse.

Default display indicates depth of water *below the hull,* total nautical miles traveled since boat was commissioned, and speed through the water in knots. (Actual speed over the ground can be read from the GPS.)

To turn on backlight, depress and hold “depth” key for one second. Then use “depth key to toggle through illumination levels.

Autopilot:

Turns on automatically when "Upper electronics" is turned on at DC Panel in pilothouse.

In "Standby" mode the autopilot will indicate True heading.

To turn on backlight, depress and hold "disp" key for one second. Then toggle through lighting levels with up and down arrow keys.

At the bottom of the autopilot display is a rudder angle indicator.

All navigational electronics have been calibrated and corrected to indicate **True** heading, not compass. Measurements are in feet, nautical miles, and knots.

VHF:

U.S. and International channel assignments can be found in the blue Standard Communications Owner's Manual Supplement accompanying the VHF Owner's Manual.

To backlight VHF screen press and hold "H/L" key while pressing "Dn" key to toggle between bright, dim, and off.

Spotlight:

The main engine starting battery powers the spotlight. The ignition switch must be on to use the spotlight.

Ground Tackle:

Wandering Tattler is equipped with two anchors. The primary anchor is a Bruce 35#, stowed in the bow chocks and connected to 200 feet of chain. It is handled by a Lofrans electric windlass that feeds the rode into the chain locker below decks. The chain locker can also be accessed through the cabinet door in the bulkhead at the head of the main bunk.
The anchor rode is 200' of 5/16" chain marked as follows:

- 8' – all orange
- 30' – orange
- 60' – 2 orange
- 90' – green
- 120' – green and orange
- 150' – 2 green
- 180' – orange, followed by 6' of orange.

When letting out the anchor rode stop when you see the 6' of orange. When retrieving the anchor be aware that the anchor is 8' out when you see all orange. Do not take a strain on the anchor windlass. Use the chain hook and tie off to the deck bollard. The anchor windlass can be operated manually by using the bar located in the port pilothouse step locker.

The electric windlass has foot controls on deck next to the bow chocks. It can also be operated from the control station next to the helm in the pilothouse. Operation from the interior station is not recommended as it is difficult to gauge the strain on the anchor line from inside the pilothouse, and there is an excellent chance of overstraining the windlass and tripping the circuit breaker, which is located adjacent to the battery under the sole of the forward cabin. The windlass has a breaker switch on the starboard side of the forward berth.

Because of the strain put on the windlass when anchored with a chain rode, an anchor stopper, consisting of a chain hook and a short length of nylon line, has been provided. When anchoring or storing the anchor in the bow chocks, please take the strain off the windlass by hooking the chain with the anchor stopper and belaying it to the deck bollard. Do not pull the vessel forward to the anchor with the windlass. Motor forward and raise the chain while rinsing the chain with the wash down at the bow (Picture #11). The wash down hose is kept in the lazarette locker. The "Saltwater Wash Down" circuit on the DC panel must be switched on. There is also a saltwater wash down fitting in the aft cockpit. To breakout the anchor, secure the chain with the stopper to the bollard. The anchor will usually breakout when the vessel is put in reverse.

The secondary anchor 22# Bruce type with twenty feet of chain and two hundred feet of nylon rode stored below decks under the cockpit.

The State Park Sticker, (Port side stern, Picture #12), allows you to moor to mooring buoys in State Parks. You will need to register at the kiosk usually located at the head of the pier. Your mooring line will be attached to the ring at the top of the buoy.

The procedure for mooring is as follows;

- A crewmember will rig mooring line to “Mooring Retriever”. (Mooring Retriever is a fitting at the end of boat hook located in the lazarette locker; Pictures #13, 14, & 15)
- Helmsman will approach left side of buoy, (buoy is on starboard side of vessel).
- Helmsman stops vessel by shifting into reverse. This will do two things; vessel will stop and because of prop walk, stern will move to starboard, or toward buoy.
- Crewmember in cockpit will jab mooring ring with mooring retriever and secure mooring line to aft mooring cleat.
- A second mooring line should be lead from the buoy to the bow cleat of the vessel. The aft line may then be released and the vessel moored by the bow.

Safety Equipment:

There are two dry chemical fire extinguishers, one mounted port side in the pilothouse, and the other mounted starboard at the aft end of the main cabin.

Life jackets are in locker, below the television.

Life Sling is mounted on stern rail.

VHF is mounted above helm station.

First aid kit is in the cabinet below sink in the head.

Flares are in the pilothouse port side step locker.

Propane Detector is located aft in below the stove/oven.

Automatic Bilge Pump is located in shaft alley underneath salon floor. Make sure switch at helm station remains in "Automatic" position.

Flashlights and extra batteries are located in portside step locker in the pilothouse.

Tapered wooden plugs for thru-hull fittings are located in the pilothouse port side step locker. See attached page for location of thru-hull fittings that are below the waterline and equipped with seacocks.

Man Overboard/MOB

You will be cruising in cold water and any person falling overboard is in real danger of dying of hyperthermia. Any person operating the vessel needs to be familiar with the Life Sling. Also become familiar with the MOB features of the radar and chart plotter. The VHF radio has a "Distress" feature, (page 20 of ICOM manual). Please review these safety features with your crew.

Inventory:

- Quick references to instruments and navigation rules are in holder on the chart table.
- The manuals for the radios are in the same holder.
- The full manuals for the instruments are in the locker under the port seat in the pilothouse.
- Spare light bulbs and batteries are in a container in the lower locker under the helm seat.
- Miscellaneous screws, nuts, bolts, zip ties, and tape are in a container in the lower locker under the helm seat.

Checklists

Getting underway:

Turn off:

All AC appliances
Hot water heater (AC panel)
AC refrigeration (AC panel)
AC Master switch (AC panel)

Turn on:

Electronics/Instruments (DC panel)
Horn (DC panel)
Bow/Stern thruster (master switch on side of forward berth turn switch clockwise, then push both "on" keys simultaneously on steering station control panel.) Thruster lights will illuminate.
Radar (to standby)
Chart plotter
VHF (tune to channel 16)

Check:

Raw water seacock -- open. (Engine room, port side forward.)
Battery switch on (***do not change battery switch position after engine has started or severe damage may result!!***)
Fresh water pump on (DC panel)
Head on (DC panel)
Forward lights on (DC panel)
Aft lights on (DC panel)
Forward outlets on (AC panel)
Aft outlets on (AC panel)
Check engine oil (dipstick port side of engine) Level should be between "Low" and "Full". If engine oil is low add oil to bring level to between "Low" and "Full". (Delo 15-40W, in engine room portside.) ***Do not overfill.***
Check raw water filter (engine compartment, starboard side, forward) and clean as necessary.
Tridata will turn on when upper electronics are turned on.

Starting Procedures:

With gearshift in neutral do not advance throttle. Turn ignition on. Low oil pressure alarm will sound. Press starter. After engine starts low oil pressure will continue to sound for several seconds until oil pressure reaches operating level. ***If alarm continues to sound after 10 seconds turn off engine immediately or severe damage may result.***

After starting:

Check exhaust for water flow. If no water is flowing from exhaust, shut down engine and check raw water-cooling system.

Keep below 1400 rpm until engine temperature reaches at least 140 degrees Fahrenheit. Pause gearshift momentarily in neutral when shifting between forward and reverse to prevent damage to transmission.

Engine shutdown

Let engine cool down by running at 800 RPM for 5 minutes before turning off engine. Turn off engine by turning ignition key to off position. The time spent getting out fenders, mooring lines, and docking is generally enough time for the engine to cool down.

Anchoring:

Approaching anchorage:

Release anchor stopper and keeper pin.
Open windlass control covers (forward deck).
Setting Anchor:

When you have come to a complete stop at preferred anchorage site release anchor and lower with windlass. While continuing to play out rode use momentary bursts of reverse to back away from anchor and lay rode smoothly. When sufficient rode is played out (3 to 1 minimum, to 5 to 1, depending upon conditions), secure anchor stopper and take tension on rode. Put transmission in reverse momentarily to set anchor.

After anchor is set:

Turn off:

Engine
Radar
GPS
Chart plotter
Lower electronics (DC Panel)
Autopilot (DC Panel)
VHF

Set anchor depth alarm if desired (Tridata)
If anchor alarm is not desired and if AM/FM CD player will not be used turn off upper electronics master switch on the DC Panel to save power.

Retrieving Anchor:

Release anchor stopper.

Open windlass control covers on forward deck.

Use short hose to wash mud and debris from rode and anchor.

Use engine to release pressure on anchor rode and use electric windlass for pulling in rode only. ***Do not use windlass to pull boat forward to anchor or overload switch will trip***. If overload switch trips, reset at battery location under forward cabin sole.

When anchor is up and in chock, pull anchor taut with anchor stopper and secure anchor stopper to bollard.

Close windlass control covers.

Docking:

After securing to the dock:

Plug shore power cord into boat before connecting to shore power.
After connected to boat and shore power turn on AC master switch (AC Panel)

Turn off:

Chart plotter
GPS (Hold down “Power/Lite” and “Enter” keys simultaneously)
Radar (Hold down “Power” key until system shuts down.)
VHF
Autopilot (DC Panel)
Lower electronics (DC Panel)
DC Refrigeration (DC Panel)

Turn On:

AC Refrigeration (AC Panel)
Hot Water Heater (AC Panel)