Downtown Sailing Center — Where sailing is for Everyone

Sweet Dreams

Vessel Orientation Information

Updated: March 2020

This is a brief description of *Sweet Dreams* systems, including on-board location of equipment, specific procedures for engine operation, and use of furling sails. Please review and understand this information prior to departing from the dock. The boat manager (listed on log sheet) can answer questions, provide support and coordinate repairs; but is not the janitorial or maid service for this boat.

General

- Accept risks only in a reasonable way. If you can, try to do the boat some good. Please report any damage, deficiencies, or improvements to the boat manager.
- Skippers are required to have towing insurance such as US Boats.
- Fuel level should not fall below ½ tank. To avoid leaks into hull DO NOT OVERFILL – stop filling early. If re-fueling is not possible, please leave cash (in ship's log book) for next re-fueling.
- Always pump out the holding tank after your cruise so that the next guests will not begin their voyage with your waste on-board.
- Record your voyage in the ship's log book located in rack opposite map table.
- Please leave her cleaner than you found her (galley, head, sole, deck, etc.), remove trash and personal effects, and store the rescue sling. Report discrepancies to the boat manager.
- Things are not static on a boat and it is used by many different people. Reasonable effort is made to keep this document up to date but be aware that things change over time and adjust as needed.

Quick Facts

<table>
<tr>
<td>Obstructions:
• Draft is 5'-6" below water line
• Depth gauge reads feet below water line
• Mast height (including antenna and windex) is 51'-0" above water line
• Width 11'-11" and Length 36'-0"</td>
<td>Batteries Switch (opposite galley sink):
• #2 engine start and "1+2"engine charging
• #1 engine off underway
• "OFF" required for solar charge
• With engine running or instruments on, do not turn the battery switch through "OFF"</td>
</tr>
<tr>
<td>Emergency:
• Bungs/hammer in starboard cabin locker
• First Aid Kit in head cabinet
• Flares in safety cabinet above quarter berth</td>
<td>Deck fills (key in map table – left side):
• Waste port near front of cabin top
• Fresh Water port side aft of shrouds
• Diesel starboard side stern quarter</td>
</tr>
<tr>
<td>Sails (winch handles - cabinet below map table):
• Jib operation utilizes normal procedures
• Mainsail – READ PAGES 4 through 5
o Deploy mainsail using short winch handle to pull outhaul - DO NOT FORCE OR OVERTENSION
o Furl mainsail using ratcheting winch handle to turn line driver</td>
<td>Engine:
• Panel faces aft and is to port of the helm
• Use glow plug for cold start (see page 3)
• Forward shift down and Reverse is up
• Shift only at idle engine speed
• Normal cruising RPM 2,000; and maximum 2,200 except for short period emergencies
• Push throttle down below idle to kill engine</td>
</tr>
</table>

Preparing For Departure

Companionway Hatch	Stow hatch slats in rack above aft quarter berth (starboard). Lay top (longest) slat first into the two brackets, then stack each slat with shortest on top. Cleat off with strap that has twist lock.
Logbook	Make sure you have reserved the boat in the on-line reservation system. Make logbook entries including destinations. At completion of voyage, complete logbook entries, close-out on-line reservation, and report any discrepancies per the logbook instructions.
Permanent solar panel	Stow only if it is in the way and must be removed. Disconnect leads and be careful not to lose any hardware including rubber sleeves. Note: When leaving vessel, the battery selector switch (red, aft bulkhead, opposite galley sink) must be in the "OFF" position for solar to charge.
Engine access	Companionway steps simply slide forward (caution – fall hazard). On the inside (backside) of the steps you will see an automatic fire extinguisher.
Through hull valves	1) Raw water engine intake. During the sailing season the valve is left open and the key is on the VHF cord. *Out of season, at shut down, the valve is closed and the key is to hang on the closed yellow valve handle. At start-up, open valve and remove key; and at shut-down, run antifreeze through, close valve, and re-hang key on closed valve.* 2) Galley sink drain. Under the sink in cabinet the yellow handle valve must be closed when underway. At anchor, or underway when sink is tended and, the valve must be opened to drain. 3) Head sink drain is also under sink cabinet. Same procedure as galley sink. 4) Head sea water intake is next to sink valve and should always be off. DSC requires use of domestic water to be used for flushing. The shower head has been removed so that its hose can be used to fill/flush head. *Note: Through hull bungs and hammer are in aft settee locker (starboard).*
Check oil (optional)	During the season, Boat Manager checks the oil and is the only person who adds oil. Off season, check oil each trip and if oil is needed, do not use boat and contact Boat Manager. Dipstick is on port side of engine under the alternator. It's a reach to find it. Make sure after checking that dip stick is fully seated.
Coolant (optional)	Normal operating temperature is 170-185º. During the season, Boat Manager checks the coolant and is the only person who adds coolant. Spare coolant is under the galley sink.
Fan belt (optional)	Check tension and look for wear. Belt should deflect about ½" with a couple of finger pounds pressure applied and there should be no cord strands visible or belt delamination. Report problems to Boat Manager.
Information only	Oil filter is starboard side and accessible from forward berth. Emergency engine stop fuel cable is on the left when facing the engine. Oil pressure sender is at the bottom rear (stern) of the engine port side.

Engine Starting Procedure

Electrical	Set battery switch to position “2” for engine start. Switch to house battery “1+2” immediately after starting, and to “OFF” to utilize the solar PV panel. Turn on the main DC and INST 1 breaker (main panel located next to the map table). To check fuel, ignition switch must also be on.
√ Engine Instrument panel	Located aft on the end/face of the port side seat opposite the helm (look left and down). The panel contains **the ignition key switch (incl starter), low oil pressure light/buzzer, glow plug toggle, coolant temperature, tachometer, and amp meter.** The **fuel gauge** is separate and just to the right of the panel. The blower switch (far left on panel) is not functional.
Engine controls	Throttle is located on the starboard side of the binnacle in front of the helm. Throttle is also the engine kill switch (fuel shut off). Gear shift is on port side of the helm binnacle (down is forward, up is reverse).
Start engine	Place gear shift in neutral and advance the throttle half way. Insert and turn the ignition key to ON. Red light next to start button will light and buzzer will sound. Hold the glow plugs toggle switch (second from left) up for 15-30 seconds (no longer) to warm the glow plugs then turn the key to start position and release glow plug toggle when engine starts. Crank no longer than10 seconds! If the engine did not start, wait 30 seconds and repeat procedure. If engine does not start after three tries, do not take the boat out and report to the boat manager.
After Start	CHECK FOR EXHAUST WATER coming out of transom and throttle down to idle. Allow the engine to run five minutes to warm up before putting into gear. **2,000 is normal cruising RPM,** 2,200 RPM is maximum cruising, and 2,800 is absolute maximum and only for very short periods of time.
Restart engine	If you throttle down too far, it will stop the engine. You will not need to use the glow plug warm up if the engine was started within the last hour.
Select battery	After starting, set battery switch to “1+2” to charge both batteries #1 and #2.

Engine Shutdown Procedure

Stop engine	There is no kill switch. Rev the engine for a few seconds then push the throttle down to idle for 30 seconds, then push down throttle lever below idle (to shut off fuel to the engine) until the engine dies. Use caution when throttling back when underway to not kill the engine unintentionally. Low oil buzzer and red light on instrument panel will come on after engine stops. Turn key to the off position – buzzer will stop. Remove key only after docking. Emergency shut down – Push the throttle linkage on the engine (starboard side of the engine) away from you compressing the spring and until the engine stops.
Turn key OFF	Turn key to the Off position. Buzzer will stop. Remove key only after docking.
Select battery	While underway (sailing), switch battery to 1 (house). If leaving the boat, switch battery to OFF so that the solar panel will charge both batteries.
Raw water intake	See through hull information. Note that there are different procedures for in season and out of season.

PREPARING TO SAIL

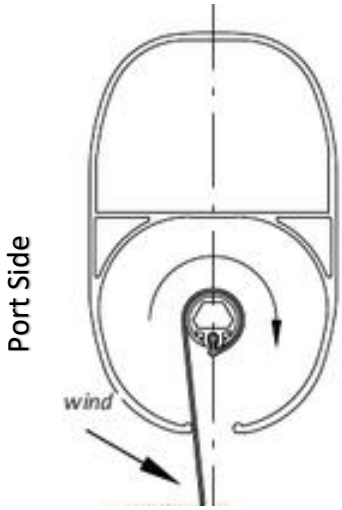
- The main and genoa sails are furling type, so use the halyards only to tighten luffs if necessary.
- The Topping Lift green line cleats to the starboard side of the boom. [see (3.) The Mainsail]
- The Outhaul blue line runs to cabin top starboard clutch/winch/cleat.

THE GENOA

- Pull out genoa with the working sheet to unfurl. Keep a bit of tension on the furling line as it is taken up in the drum during sail deployment so that line does not foul. Observe that the line wraps evenly onto the full height of the furling drum.
  Note: If the jib blocks are not on the toe rail, they may be stowed in the map table.
- To furl, pull furling line while keeping slight pressure on the working jib sheet.

THE MAINSAIL – READ CAREFULLY AND UNDERSTAND!

In-mast furling can have its issues, but most of these are caused by operator error. Here's how to get a successful deployment and a tight furl every time. It is easy to jam the sail in the mast and you do not want to pay for replacing the sail and/or the mast!



1. Locate the short winch handle and unsnap starboard side of dodger and fold back and secure with bungee so you have winching clearance.
2. Orient your self – looking down from the top of the mast, the in-mast foil revolves clockwise. To deploy or to furl the mainsail, put the boat on a slight port tack so that full height of the sail is not dragged over mast groove.
3. Topping lift (green) is set correctly for the required boom angle above horizontal. Do not adjust (line and boom marks should be aligned).
4. **Fully ease the vang and mainsheet** and ensure they remain fully eased (w/o tension) during deployment or reefing/furling. There can be no resistance to the boom wanting to lift!
5. To put your mainsail in or out always sail upwind on slight port tack. If you try to furl (including partial for reef) the sail in downwind, you'll probably get a jammed sail.

Deploying the mainsail - BE AWARE THERE ARE TWO LOCKS, and never ever try to unfurl the main with the continuous line driver winch as you will jam the sail in the mast and may have to pay for replacing the sail and even the mast if the sail cannot be removed. You will use the outhaul line (blue) and the two speed winch to the right of the line driver.

- **First step and before you do anything:**
  - Locate the (#1) lock that is a pin located at the mast gooseneck (pulls out to disengage [vertical] and pushed in [horizontal] to engage). This lock should always be disengaged except to hold a reef in extreme conditions of 20 knots or more.
  - Locate the (#2) lock/ratchet on the continuous line-driver (flat looking reefing winch) located on the cabin top. The line driver lock/ratchet should be disengaged for deployment by putting toggle in the 45º (out) position.
- Slacken tension of the continuous line by pulling up detent pin and sliding line drive forward until it clicks into next detent pin hole. Line should be very slack and laying on cabin top.
- Take two wraps of outhaul (blue line) around winch and lock the cabin top clutch. Using the short winch handle, pull the mainsail out with the outhaul – DO NOT OVER TENSION. STOP if outhaul line is tight, check again that #1 lock is disengaged (out). If the sail is not moving easily, DO NOT over winch it and break/bend something. Go up to sail and try to pull out by hand, and keep looking for what is causing the resistance.
- When sail is fully out, take wraps off of winch and cleat the outhaul line.

Furling or reefing the mainsail

- Move the Dodger out of the way and secure with bungee. Sail upwind on slight port tack.
- Locate the large ratcheting winch handle and set so that it will turn the line driver (flat looking winch) clockwise. Prepare the continuous line by unpinning the line driver detent and sliding the unit back until the line is as tight as you can get it and the pin clicks into place (re-tension if necessary after a few rotations under load).
- Are you on a slight port tack windward? The continuous line driver will drive the mast foil to roll the mainsail into the mast. Unlock the outhaul clutch. Using ratcheting winch handle, crank line driver clockwise while keeping slight tension on the outhaul so that sail rolls tight without creases. Don't keep too much tension on the outhaul, as this will drag the foil aft in the mast and bend it, causing the sail to rub against the inside of the mast, again causing friction.
- **If it is difficult to get the first few turns of sail into the mast, check that the boom vang and main sheet are fully eased and topping lift is properly set.** There can be no downward pressure on the boom!
- If the continuous line is slipping, move line driver aft another notch or two.
- Always look at the sail as you're furling, so you'll be able to notice issues as they happen, and not after you've, say, wound an inch-thick clump of sail through a half-inch gap.
- Continue furling only until the UV protection strip begins to go into the mast. It must be showing.
- TO REEF**,** set the line-driver toggle to the horizontal (parallel to cabin top) position to lock the winch so that it will only turn in the clockwise direction. This will cause resistance to the continuous loop line to keep sail from unfurling (pulling out). Stop winching the line driver at the point where you have the sail reefed to where you want it.
- To hold a reef in extreme conditions (20+ kt winds), locate the foil (#1) lock located at the mast gooseneck and engage it (goes in). The foil lock will keep the sail from unwanted unfurling if the line driver cannot keep the continuous line from slipping.
- Last reefing step is to winch the outhaul line until sail is properly tensioned. DO NOT OVER FORCE!
- **IF YOU EVER DO ENGAGE THE #1 FOIL LOCK PIN, AVOID AN EXPENSIVE REPAIR** AND DO NOT FORGET TO DISENGAGE IT BEFORE ATTEMPTING TO FURL THE SAIL!

Equipment/Supplies/Notices: USCG Required

Fire Extinguishers	(1) Side of companionway (port) (1) Cabin aft opposite head (starboard) (1) Head below sink (1) Engine compartment (automatic – not required)
Flares	Cabin aft cabin upper cabinet (starboard)
Flare Gun (not required)	Cabin aft cabin upper cabinet (starboard)
PFDs	Four pack Type II PFDs cockpit; cockpit locker (port)
Air Horn	Cabin aft cabin upper cabinet (starboard)
Oil Waste Placard	Companionway
MARPOL Placard	Companionway

Equipment/Supplies: DSC Required

Anchor/Spare	33lb Bruce (claw style) in anchor locker one with 200' of rode with labels at 30, 50, 90, 120 and 150). There is also a 22lb Bruce and a 14lb Danforth (fluke style) located in aft cockpit lazerette (port)
Bimini and Dodger	Cabin forward settee (starboard)
Boat Hook	Cubby above aft berth (port)
Bucket/Sponge	Stern cockpit lazarette (port)
Bungs (assorted sizes)	(and hammer) aft settee locker (starboard)
Charts	Above cabin settee, behind wood lattice (port) and in map table
Dock Lines and Fenders	Cockpit lazarette (port)
Dodger and Bimini	Cabin forward settee (starboard)
Emergency Tiller	Aft cockpit lazarette (port) – access rudder through inspection port. Remove the no longer functioning helm wheel (Edison nut unscrews) if you need more room to steer. Catch the shaft key when it falls out
Engine Coolant	Under galley sink
Engine Oil	Under galley sink (not on board – in Cruisers Locker).
Fan Belt	Aft cabin settee (starboard)
Fans – A/C Circulating	Shelf above cabin settee (starboard)
Fasteners, Hoses, Clamps	Aft cabin settee (starboard)
First Aid Box	Head cabinet above sink
Flashlight	Map table
Horn (air horn)	Right lower cabinet under map table (starboard)
Life Jackets (extra)	Cockpit lazerette (port)
Log Book	Side of companionway (starboard)
Radio VHF	Adjacent to map table (starboard)
Table (cabin)	On aft berth or settee – there is not a specific place to stow
Table Legs	Aft cubby above berth (with boat hooks and boat brushes handles
Type IV Throwables	Cabin settee or stern cockpit lazerette (port)
Tool Kit	Aft cabin settee (starboard)
Winch Handles	Below map table, right cabinet (starboard)
Sponge, cleaners	Under galley sink.
Sail Bags	Cabin forward settee (starboard)

Equipment/Supplies: DSC Recommended

Boat Manuals	Cabin aft cabinet above settee (port)
Boat Soap	Under galley sink
Cleaning Supplies	Under galley sink
Garbage Bags	Second drawer opposite galley sink.
Paper Towels	Galley shelf
Life Sling (rescue sling)	Hang on Stern Pulpit, stowed on V-berth
Shore Power Cable	Stern lazarette (starboard), connection point on starboard combing
Solar Photo Voltaic Panel	PV panel and should be horizontal summer, and south pointing winter

Deck Fill Locations

Waste Pump-out	Port side near front of cabin top
Fresh Water	Port side near front of cabin top
Diesel Fuel	Starboard side stern quarter

Bilge Pumps and Thru Hulls

- Electric Bilge Pump is located in the aft bilge. It is hardwired directly to the battery. It is triggered either automatically by the float switch (next to pump). Pump can be switched on MAN (manual), OFF, or AUTO at the BILGE PUMP switch located on the galley bulkhead opposite the sink. If you test operation with MAN you must ALWAYS LEAVE SWITCH ON AUTO!!
- Manual Bilge Pump works very well and is located on the aft cockpit, starboard side, between the side and stern seats. The pump handle is located with the winch handles in the right locker under the map table. You have to pump a dozen or more strokes to prime it and if then still no resistance, then there is likely no water to pump.
    - IF WATER COMING FROM SOLE, The current automatic bilge pump is located high in the hull and there is too much bilge water. Lift port cockpit locker and find white hose that you will then place over the side or in the drain from the cockpit sole. Activate Deep Bilge Pump switch, next to battery switch, only until no more water is being removed.
- Shower sump pump works, but there is no hot water. However, it can be used along with shower hose to clean-up head. Turn on main, water pump, and shower breakers and turn on sump pump by pulling out knob located on shower wall above and to the right of the head (labeled). Push in to turn off when shower sump is drained. There will always will be a little water left in the sump which is fine, but please dry shower pan with a sponge or towel.

Thru-hull	Seacock	Location
Engine Raw Water Intake	yellow handle	Under companionway stair locker
Engine Exhaust	no	Under transom, port side
Galley Sink Drain	yellow handle	Under sink cabinet. KEEP CLOSED WHILE SAILING
Head Sink Drain	yellow handle	Head, access under sink. KEEP CLOSED WHILE SAILING
Toilet Raw Water Intake	yellow handle	Cabinet the head sink
Holding tank discharge	yellow handle	Cabinet below port settee, forward
Transducers (depth/sonar)	no	Bilge access outside the head
NOTE: Through hull bungs and hammer are in starboard aft settee locker		

Electrical instruments, radio, etc.

- **When leaving the boat the battery switch must be set to "OFF" for the solar panel to charge both batteries.**

  Important note: Never turn a battery switch through "OFF" while the engine is running. The alternator can be damaged as it needs some place to send the charge.
- VHF Radio requires Radio breaker to be turned on. Consider carrying/using a portable VHF for cockpit/emergency use.
- AM/FM Cassette Player requires Inst 1 breaker to be turned on.
- Autohelm ST4100+ requires code 8030 to operate. Autohelm breaker must be on and the code is entered by first pressing "DISP", then enter the first digit by using the -1 or +1 to scroll to correct number, and press "DISP" to enter that number and move to the next digit. Repeat for all four digits and then "DISP" and unit will unlock go into "Standby" after the last number has been entered. For more information on use try http://www.cncphotoalbum.com/serviceguides/autohelmst4000.pdf
- Depth Sounder and Wind Speed Instruments require MAIN breaker to be turned on, as well as the "Power" switch on the black "Datamarine" panel located directly below the breaker panel. Please, **always leave Datamarine panel switch on** (up position).
- Knotmeter turns but speed is not visible on gauge. Preferred is to use your personal GPS.

Shore Power cable is stowed in stern cockpit lazarette (starboard)

Connection point is aft combing starboard side. Connection procedure – Make sure main 115V main breaker and shore power breakers are both off, connect cable to boat with 1/8 clockwise twist (secure cable so that it cannot pull on connection point), connect shore end and turn on shore power breaker, then finally turn on boat main breaker and other desired breakers. Water heater and cabin heater are not in service. Disconnection procedure is the opposite of connecting and please be sure connection point cap is gently screwed back on being sure not to cross thread and please do not over tighten. Power cable adapters, if needed, are located in map table.

Galley Stove [Seaward compressed natural gas (CNG) stove]

Use only when docked. Gas cylinder is in port cockpit lazerette and must be turned on before and after use. After use, turn off fuel at the cylinder then light burner to burn off fuel from line. Make sure all stove controls are in off position. If you use stove, please leave money along with the diesel fuel funds in the logbook, to refill the CNG tank ($10 per hour of use).

Camp Stove

Use only when docked. Stove is located in the starboard aft cabin settee. Can be used on the stove top. If you use it, please, along with the diesel fuel funds left in the log, please leave money in log book or replace any 8 oz. fuel canisters used with a new one (Walmart, Cabela's, etc. about $3 each).

Head (Raritan PHII)

The head should be flushed using water from containers carried on board or from the sink. Do not use the head raw water intake to flush. Always leave an inch or two of water in the bowl to seal the trap.

Domestic Water

Not for drinking. Refill after each overnight voyage. Pressure is switched on at the DC Panel.

Duo-Battery Solar Controller [Dual Battery Solar Charge Controller 20A 12V]

The charger controller controls the battery charging from the solar PV panel. It is located above the main battery switch. The LCD display has green blinking lights if charging and solid if charged.

Portlights

Please be very careful when closing portlights. Please push them in by hand, then just snug the dogs. Over-tightening can break them and will cause the seals to collapse and no longer seal. All the portlights are operational, but water and dirt collects on the outside flange and can fall in when opened. If you use the portlights, be sure to clean them with only soap and water before closing them back up. No cleaning solvents of any kind. When opened after a rain, water comes in – please dry surfaces.

Refrigerator 12V / Cooler

Adler Barbour 12V refrigerator is currently not operational. The cooler box may be used with ice and please pump out water with the foot pedal below drawers in galley opposite the galley sink. Please be gentle with the top bi-door lid.

Other

- Bimini and Dodger once installed for the season should not need to changed. Offseason, store in forward settee locker (starboard).
- Manuals and Sailing Books are in the aft cabinet magazine cabinet that is above the port settee.
- Prop Walk is to PORT with engine in reverse. The boat maneuvers well in reverse, but hang on tight to the wheel as her large rudder can swing fast and do damage to steerage if not controlled.

Specifications

Boat Type / Year	S2 11.0 A / 1982; Performance Handicap Racing Fleet # PHRF-180 (162?)		
Boat Builder	S2 Yachts (designer Arthur Edmunds)		
Boat Registration	MD 7916 DB Dec 31, 2018 Hull IDI#SSU36111MB2E		
Hull Type	Fin with spade rudder		
Length (LOA)	36'–0"	Waterline (LWL)	28'–3"
Beam	11'-11"		
Draft	**5'–6" (max)**		
Mast height DWL	49' 0" not including windex and antenna (**use 51'–0"** to be safe)		
Rig Type	Masthead Sloop	Total Sail Area	625 ft^2
Displacement	15,000 lb	Ballast	6,000 lbs. lead
Engine	Universal Diesel, 3 cyl, 24 HP, max cruising RPM 2,200 (2,800 absolute)		
Engine Model	5424 (Serial #310978)		
Engine Fluids	Oil 5-6 quarts 10-40W, Antifreeze 6 quarts		
Filters	Universal Marine: Fuel #29854; Oil #298852; Racor Fuel/Water Separator 'O'-rings - upper p/n 12003-B, lower 12013-B		
Fuel - Diesel	**50 gallons**		
Batteries	#1 is House	#2 is Engine Starting	**Switch OFF to Solar Charge**
Fresh Water Tank	80 gallons	Waste Holding Tank	30 gallons