Wildflower J35C



BOAT MANUAL

J-35C "Wildflower" Boat Manual Seattle Sailing Club

Welcome aboard "Wildflower", one of our awesome J35Cs in the club. We are doing everything possible to make sure this boat is always ready to go for a day-sail or a two-week adventure. Please treat her with the care she deserves, like she is your own boat. This manual is designed to make your trip easier and give you the extra information underway you may be seeking. Help us out by filling out and turning in the user reports each sail



so we can continue providing the safest and best equipment possible. Thanks and have a great sail! SSC

Wildflower is one of the favorite boats in our fleet for the following reasons:

Racing performance combined with great cruising comfort and amenities. Solid boat in various wind conditions

Usable layout - for 1, 2 or 3 couples, two couples and kids, or 7 friends willing to share bunks. Nice dodger for sun and rain protection. (To prevent damage please DO NOT disassemble!) Chart Plotter/Radar-great for low visibility.

Wildflower's Challenges - Things to Know

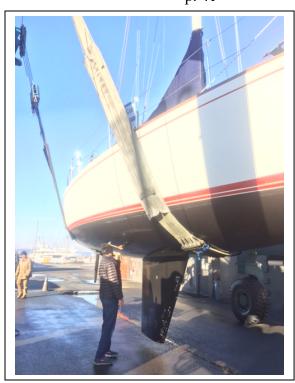
Anchor windlass lowers *and* raises anchor. Refer to manual. Operate very carefully! Take your time! Especially slow down as anchor breaks surface so it doesn't swing wildly and damage the gel coat. Also, in v- berth, slide anchor locker cover UP before trying to pull OPEN. The hatch will break if you force it. See diagram on locker cover.

Main sheet- important to control the main sheet during a jibe to protect the binnacle instruments

Important! On the gear shift lever Neutral is slightly ahead of center. Make sure you know where gear positions are before departing.

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J-35C-Wildflower

Boat Specifications

LOA: 35.2' Beam: 11.1' Draft: 6.4'

Mast Height (Above Water): 49.1'

Gross Tonnage: 12GRT

Fuel Tank capacity: 21 gallons Water Tank capacity: 65 gallons Holding tank capacity: 25 gallons

Anchor: 22 lb Bruce anchor, Rode Length: Chain is 200 with 20' markings in thin black marks starting from the end of chain. There is a small Danforth in STB deck storage and a large Danforth w/ 140' line in port cockpit locker.

A/C Outlets: Several 12V Outlets: 2

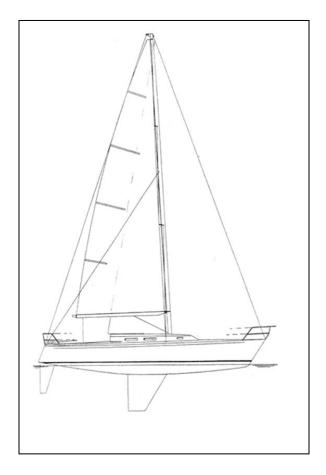
Engine: 3GM30 28 HP Yanmar

3 cylinder diesel

Accommodations: Sleeps 7, hot/cold water, stove with oven, 12v refrigerator, stereo, head, dodger, windlass.

Instrumentation: Compass, Fathometer, Knot meter, Distance log, GPS, Radar.

Sails: Mainsail with two reef points. Roller Furling Jib/Genoa with adjustable fairleads to cockpit.



Wildflower-J35C Inventory List

OPERATIONS EQUIPMENT

Edson dinghy step (metal)

Location

Currently not on the boat

Bruce Anchor-22 lbs. w/ 200' chain Bow anchor locker Large Danforth w/chain and rode Port Cockpit locker Small Danforth anchor w/chain and rode Stbd. deck locker/rode in port cockpit Boat Hook (2) Port cockpit locker Above stbd. settee 2 Winch handles 1 Shore power cord-50' Port cockpit locker 1 Shore power cord-25' Port cockpit locker 1 water hose/brush Port cockpit locker Spare Engine parts/Tools Deck keys (2) Chart table Fenders (6) Stow in port locker when underway

SAFETY Location

6 Type II PFDs in bag
1 Type IV Throw cushion
Life Sling
Stern Pulpit
Bucket
Port cockpit locker
Stern Pulpit
Port cockpit

Manual Bilge Pump Handle Tethered inside portside locker

1 Type ABC: 1 - Fire Extinguisher Forward cabin

1 Type ABC: 1 - Fire Extinguisher Port side companionway steps

1 Type ABC: 1 – Fire Extinguisher Aft cabin

2 Air horns w/ replacement canister Above starboard settee Flare kit w/ 4 handheld and canister kit w/gun, 1 whistle Above starboard settee

Flashlight Above starboard sette

First Aid kit/Disaster supply kit

Emergency Tiller

Port locker above settee table

Port cockpit locker

Emergency Tiller Port cockpit locker
Spare line Port cockpit locker

Wooden Plugs Chart table/tied to thru-hulls

NAVIGATION MATERIALS & TOOLS

Chart Books- Puget Sound/San Juans Captain Jack Tide/Current Guide Parallel Ruler/Dividers

Pencils Binoculars Chart Table

Inventory (cont.)

GALLEY ITEMS (located in Galley)

2- Piece Broiler Pan (oven) Kettle (aft of stove) 6 Lg. Plates (stbd. settee locker) French press (portside galley) 6 Sm Plates Cutting Boards (under stove/steps) Folding dish rack (behind stove) 6 Bowls 4 Lg. plastic glasses Custom cookie sheet (oven) 4 Cups/4 sm. coffee mugs " 2 lg. coffee mugs Salad bowl (above port settee) Silverware 5 piece X8 (utensil drawer aft stove)

Nesting SS cookware w/sauté pan, 5qt pot/lid, 4 qt. pot/lid 2.4 qt./lid, 1.5 qt./lid, 2 handles(behind stove) 3-piece knife set w/covers (drawer aft stove)

Large silicon spoon Silicon basting brush Silicon spatula Silicon batter mixer Silicon BBQ Tongs BBQ brush Lighter (portside galley locker) Cork screw (utensil drawer above sink) SS measuring spoon set Can opener

ADDITIONAL SUPPLIES

Location Toilet Paper – 1 roll per night in plastic bag Head-above sink aft of stove Dish Soap Teak soap holder Head 2 Scrub pads aft of stove Paper Towels portside galley locker Garbage Bags portside galley locker portside galley locker Hand sanitizer Zip lock bags portside galley locker Large cleaning scrub brush Port cockpit locker Small detail scrub Port cockpit locker below chart table Small dust pan and broom

Safety Equipment/USCG Required items

<u>Registration</u>- *Wildflower* is a documented vessel and her papers are kept in the chart table in the front of this manual.

<u>PFDs</u>-Although each sailor should supply their own PFD to fit their body type and usage requirements, many times there are extra personal floatation devices stowed in the port cockpit locker. Know where and how many are aboard before you leave the dock.

<u>Type IV</u>'s -There is a USCG throw ring on the port side stern pulpit. There is also a Life Sling rescue device attached to the starboard stern pulpit. If you plan to depend on this method make sure to get familiar with the fittings unique to each vessel.



Life Sling /Type IV Flares and horns in main cabin



ABC: I Extinguishers- Aft cabin/ Portside companionway /forward cabin

Safety Equipment (cont.)

<u>Flares</u>- There are flare kits with current handheld flares located in the main cabin above the starboard settee. Please ensure these are dated properly and look usable with each sail.

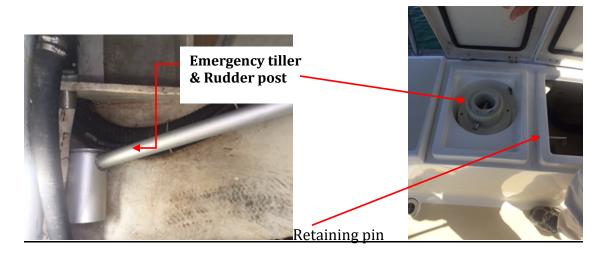
<u>Fire extinguishers</u>- Type ABC-I extinguishers are located in the (1) forward cabin, (2) port of the companionway steps, and (3) in the aft cabin.

Air Horn- (with 1 replacement air cartridge) located above the starboard settee.

Running lights- Switches are on the DC panel labeled "Running lights" (sailing) and "Steaming light" to add for motoring between dusk and dawn. For club use these are emergency-only as it is against club policy to sail after dark. (See page 20)

Additional safety equipment:

<u>Emergency tiller</u>- stowed in the portside cockpit locker, the emergency tiller fits into the rudder post fitting just the <u>aft of</u> the steering station. There is a retaining pin that needs to be carefully removed to open cover to rudder post. Make sure you are comfortable with using the emergency tiller before there is an emergency!



<u>Wooden plugs</u>- tapered wooden plugs are in the chart table and tied to thru-hulls in case of valve failure. Refer to thru-hull map on pages 31-32 to locate each valve before sailing.

First Aid Kit-Located on PORT side locker above the table



Safety Equipment (cont.)

<u>Manual bilge pump</u>- socket located port aft in the cockpit. Handle in the chart table. It takes 10-15 pumps to prime.







Electric Bilge Pump

Manual Bilge Pump

3-way switch

<u>Electric Bilge Pump</u>- The electric bilge pump can be found just forward of the engine compartment. Switch is located below the chart table next to the battery selector knob. (See pg. 16) The bilge pump switch is typically in the auto position. Leave in this position to activate float switch. "Manual" is to pump per use… "Off" is in the middle.



Spare lines /Stern anchor/oars /portable bilge pump-(port locker)// Wooden plugs/ manual bilge pump handle (chart table)

Wildflower's INBOARD SYSTEMS

The Engine-Starting/Stopping/Operating

Wildflower is powered by a Yanmar-3YM30 28.5 HP 3-cylinder inboard diesel engine. This is a great engine and if cared for during your charter will serve you well. Always make sure the engine is getting coolant, lubrication, and proper fuel by completing the checklist each day.

ALWAYS check the following before starting the engine:

- Fresh water coolant -level between lines
- Raw water intake valve open and strainer clean
- Oil level-between high and low lines
- Transmission linkage operational (shifts btwn gears) *Neutral* is angled slightly *forward*
- Belt/hoses look connected
- Water/fuel separator- color not dark brown
- Stuffing box/shaft coupling. This is a dripless seal and should not drip!
- Fuel level-should be at least half full.

Good to know where the following are located: Fuel shut off, raw water impeller access, batteries, start-solenoid/starter, Spare engine parts/tools.

Pre-start Checklist

- Check fuel level-gauge located aft of the start panel portside cockpit. Make sure instruments switches are "on" at the DC panel. Then turn the key to gain access to the instrument.
- Check oil level. Preferred level between ¼ and ½ mark. Make sure oil dipstick is completely re-inserted to prevent oil leakage. Do not fill oil yourself! If level is too low **or** too high let SSC know!
- Make sure raw water intake valve is open, located aft of engine. (see pic below)
- Make sure raw water strainer is not clogged (Close raw water seacock then unscrew lid located aft of engine- (see p. 10)
- Make sure there is ample fresh water coolant-located just above engine (See p. 11)
- The engine start and house batteries are located under the port settee and outboard of the chart table.
- Turn all battery selector to #1 (p.16) under the chart table.
- Turn off and disconnect shore power from dock.



Oil Dipstick/ Fuel Filter/ Raw water impeller/ Fresh Water expansion tank

ENGINE Start/Stop (cont.)



Washdown seacock/ Dripless shaft seal/ Muffler/exhaust/ Raw water strainer / Raw water intake

Starting the Engine

- Pull out the black knob on throttle/shift lever (this will disengage the transmission)
- Push the throttle lever forward about a third of the way (see picture below)
- Turn key to glow to pre-heat. Then turn key to on. See picture p. 13
- Turn key to "Start" for about 5-10 seconds and engine should start :)
- Check to make sure water is flowing out the back

Engine Panel



Tachometer/ Key/ Start/Stop/ Fuel gauge/Throttle/Gear Shift

ENGINE Start/Stop (cont.)

Once Started

- -Ensure smooth idle speed for warming up. (Approx. 1500 RPM see tachometer below) Run engine for 5 minutes before putting in gear.
- -After warming up the engine, bring the throttle down (vertical position) this should also engage the transmission.
- -Test forward and backwards movement if safe to do so. **Important!** Neutral is slightly ahead of center. Make sure you know where gear positions are before departing.

Once Underway-When the Yanmar is warmed up, the maximum cruising speed is 2800 RPM. 2500 is best. Never run the engine too high as it will overheat, reduce your fuel consumption rate and not increase your hull speed. Refuel if your tank is less than ¼ as you will get into the sludge at the bottom of the tank and plug up filters. If at any time your engine alarm sounds, check for water coming out the exhaust then STOP the engine. You may have run over something to plug up coolant or the water pump may not be working properly. Check the strainer, then if nothing is obvious, call SSC. Of course raise sails and get the boat in a safe maneuvering situation as needed!

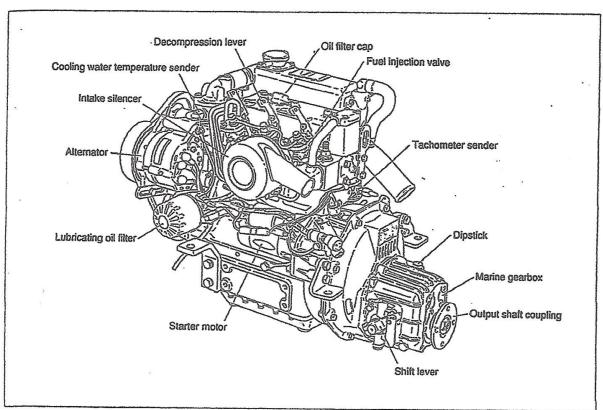
Stopping the engine

- -Place throttle in idle (vertical) position
- -Let the engine cool down for 5 minutes
- -Push stop button until engine stops which is located just above/forward on the start panel.
- -When alarm sounds, turn off key last. Do not do this first or you may damage the alternator!

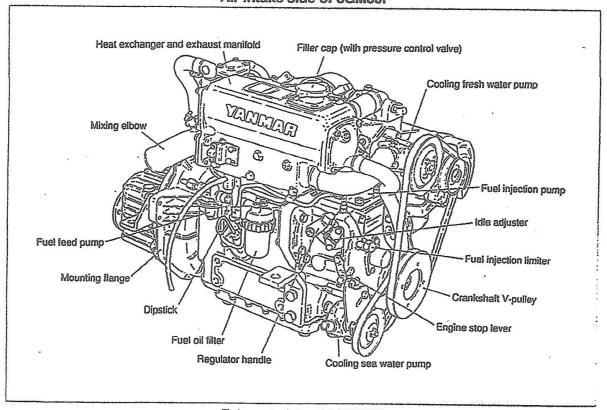


Glow/Off/Key/On//Start/Stop button

1. Name of parts



Air intake side of 3GM30F



Exhaust side of 3GM30F

Engine (cont.)

<u>Refueling</u>- Only refuel if you charter overnight. *Wildflower* has a 21 gallon fuel tank and burns approximately 3/4 gallon per hour (GPH). Estimate fuel needs before you begin fueling to anticipate the amount and not overfill. The fuel deck plate is located stbd. aft. Make sure you access the Diesel **not** Water deck plate! The fuel gauge is located forward of the engine start panel. Flip the switch for "Instruments" to see the fuel level. Tank is located under the starboard quarter berth with an emergency fuel shut-off valve in the aft cabin.

NOTE: When filling the fuel tank, please fill slowly as this boat has a tendency to bubble up quickly and before the tank is full. Vent is aft stbd. Double check the fuel gauge to estimate amount and to ensure you have filled the boat up completely. Do not top up.



Fuel Tank/manual gauge/shut off-aft berth





Day tank for forced air heater (Do not fill for engine!)

Electrical System

System- Wildflower has 2- 12 volt batteries starboard and outboard under the chart table. Battery selector knob is also under the chart table. DC batteries will activate all switches on the DC panel operating lights, navigation instruments, stereo, fresh water pump, bilge pump, etc. Leave "on" when in use. There is one 12v plug above the chart table. There is also a battery gauge above the chart table. Please check this continually and do not run any battery below 12.5v as this will severely shorten their lifespan. Once down to this level, limit use as much as possible until you plug in and recharge. Utilize batteries by turning selector to #1 to start engine, "ALL" to recharge batteries with the engine running, and #2 (only) for house systems when sailing/anchoring to conserve the start battery. Plug into shore @ dock to get the best charge with AC battery charger. (p.17) NEVER turn selector knob Off then On again when the engine is running or you will damage the alternator!



Battery Selector knob/ Bilge Pump Switches



Batteries under chart table

DC/AC Panel



<u>AC System-Wildflower's AC</u> system is primarily to recharge batteries, run hot water heater, and access outlets for heaters, cell phone chargers, etc. There are 110 volt outlets throughout the cabin. The AC panel is next to the DC panel on the stbd wall above the chart table. Main breaker switch is at the top. To access AC, plug in the shore power cord with all breakers off. Then turn on the shore breaker (1) and boat master breaker (2) then desired switches.(3) ***Very Important!***





Electronics

VHF- to access the VHF radio, turn on the "VHF" switch on the DC panel then turn right power button to turn on the unit. The lower knob tunes in the squelch until just not "fuzzy". The arrows tune in channels. The radio automatically comes onto Channel 16, the USCG emergency station. Call "May Day" 3x in life threatening situations. "Pan! Pan! Pan!" in urgent/ distress and simply "USCG" if unsure. Know your position, how many onboard, life-threatening circumstances, boat name.

Important: the VHF has a DSC emergency button fully functional and registered with USCG and international agencies. GPS must also be on to use this feature. Only for real emergencies!

Additional channels:

68-72 non-commercial for extended conversation

14- Vessel commercial traffic

13 Bridges

WX 1-4 weather (push on "WX" button mid-right)

17 Port of Seattle (Shilshole)

Lights- Cabin, Running (sail), Steaming (power), Anchor, Foredeck. (p. 20)

<u>Depth/Speed/Distance</u>- Raymarine units accessed through "Instruments" switch on panel are located above the companionway ahead of the steering station.

Depth reads as water below the 6.8 ft. keel.

GPS- Next to Navigation station. Access through "instruments" switch.

<u>AutoHelm</u>- located to starboard of the steering station, this instrument is activated by the "instruments' switch on the panel. To utilize, push "Stand-by" button on unit, turn boat to desired compass course, flip down clutch on steering column, push "Auto" button. Adjust with +/- 1 degree or 10 degrees. Cancel by pushing "stand-by" or turning off at panel. **Never** turn wheel with clutch grabbing column as you may damage steering quadrant.



VHF GPS/Radar Depth/Speed/Wind gauges above the companionway

Electronics (cont.)



Transducer for knot meter Transd

Transducer for depth sounder

Forced air diesel heater – disabled currently

Use the 110 volt portable heater provided. Turn on breaker labeled "spare". Plug in below navigation station.

Electric Bilge Pump



Under main salon table

Three-way switch- Auto-Off-Manual



DC Panel

DC Switches

DC Main Cabin Lights Running lights Steaming light

Anchor Light
Gas Valve
Water Pressure
Shower Pump
VHF
Instruments
Foredeck Light
Pump

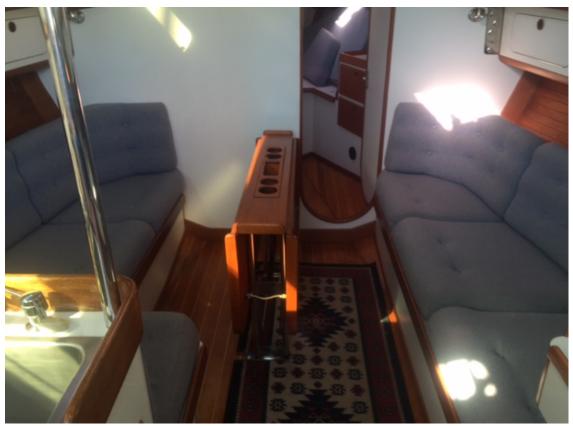
AC Switches

Main Breaker Outlets Port Outlets STBD Battery Charger Water heater Spare



Accommodations

Wildflower has a lovely interior with two enclosed cabins and two extra long berths in the main salon. There is an L shaped galley with ample storage and a 12 volt refrigerator to port, a chart table to starboard, great electronics and a marine head and shower.



Main Salon



Chart Table

Forward Cabin



The forward cabin is quite spacious and has good light coming through the hatch. There is a "v" expansion to complete the berth for ample sleeping comfort. Extra storage is provided with a hanging locker and several drawers.

Aft Cabin



The enclosed aft cabin has a 6 foot double berth comfortable for one or two that know each other well. There is a hanging locker just forward and a small shelf for accessories.

Galley Systems

Wildflower has a very comfortable galley with a two-burner propane stove and oven, a 12v. refrigerator / ice box and double stainless sinks with fresh water foot and salt water hand pumps in addition to the primary electric water pump and hot water heater. The salon lays amidships port and stbd. Aft of the dinette area is the L-shaped galley to port.



Propane Stove/Oven system

When operating the propane stove it is **crucial** to follow these **steps for safe operation**.

To light the stove:

- (1) Open the gate valve on the propane tank (located in the starboard lazarette.) PSI gauge should activate indicating approximately 100psi which is full. There is a spare propane tank if primary runs low. Check with staff before switching tank.
- (2) Next, turn on the solenoid switch located on the DC panel labeled "gas valve" (no indicator light).
- (3) Light the propane lighter holding next to the desired burner.
- (4) Finally, expose the selected burner to flame and push and turn the gas control knob on the stove counter clockwise. Once lit, keep holding in knob for 15 seconds to activate safety sensor.

Force Ten Two-Burner propane stove and oven



Note: If burner does not light, recheck earlier steps. Also double check you were not filling the oven with wrong (oven) valve! When lighting the oven, there is an up arrow for oven and a down arrow for broiler. Make sure to hold lighter right by desired burner so as not to fill the entire oven with gas before it lights! Anytime there are propane fumes lingering, ventilate boat completely before restarting process. Propane is wonderful but highly volatile if used improperly!

To shut down propane: (1) First, turn off the solenoid switch "gas valve" on the panel. (2) Once flame is extinguished, turn off knob(s) on stove. (3) Finally, turn off valve on the propane tank. Especially make sure this is closed at the end of the day. Enjoy your food!

Ice Box/Refrigerator

Wildflower is equipped with a trip refrigerator/icebox which is cooled by a cooling plate via a circulating salt water pump. Turn on at the Isotherm panel in galley- then up/down arrows for temperature adjustment. (See picture below) Only run the refrigerator when motoring or plugged into shore-power as it drains the DC system quickly. In-between, throw-in some ice to maintain a cool temperature. Replenish ice as needed every other day and eat most vulnerable foods first...raw meats, berries. The space works well if kept organized. It is best to keep meats and heavy liquids close to the bottom and put produce, eggs and cheeses up higher. When done with your trip, make sure to drain out all the ice water. The drain hose is under the galley sink and has a gray shut-off valve which empties upstream of the actual bilge pump. (see Pic below) So it's good to keep food particles out of drain and give it a good amount of water to flush cleanly through the bilge. Leave ice box lid open after use to air out.



Refrigerator elements

Ice Box Drain under galley sink

Fresh Water System

Wildflower has two 32.5 gallon water tanks located under the port/starboard settees. Water may be filled through the deck port, located on the port/starboard side. Best to alternate water usage per day to keep boat weight distribution level. (See picture of valves below). To operate valves, turn only one on at a time. Turn valve left to open, right to close.

To access the water first flip the "water pressure" switch on the DC panel. You should be able to hear the pump working. Turn on the desired knob on the galley sink faucet, head sink or shower nozzle. (Also, turn on the "shower pump" switch if you are showering.) The system has an accumulator tank built in which contains a small amount of water per use. This allows water use without running the pump/battery each time. As the accumulator tank runs low, the pump kicks on to refill. If you hear the water pump turning on and off or running incessantly, first make sure you didn't leave the shower running! Otherwise it could be a low tank allowing an air leak which fools the system into turning on. Refill low tank when you can.



Fresh water foot pump/ Fresh Water pump/Galley sink seacock/plug

**If either the galley or head sinks are not draining, or are taking on water, there is a seacock located under each sink for overboard discharge/shut off. Make sure you still know how to close in a pinch! Although it is still legal to discharge grey water, always be conscious of what you are throwing down to our saltwater pals.

<u>Fresh water foot pump</u>- you can access fresh water without using battery power by using the foot pump below the galley sink.



<u>Hot Water Heater</u>- The switch for the 12 gallon water heater is located on the stbd. side of the electrical panel above the chart table. **Make sure** there is water in the tank before turning the water heater on, failure to do sure could result in **serious** damage to the heater! Water is also heated through a heat exchanger while running the engine. Best time to shower onboard or do dishes is when just arriving to your anchorage!

Head Systems

<u>Shower</u> -To utilize the shower simply turn on the "Water pressure" and "Shower pump" switches. Shower nozzle pulls out of head sink fitting. Activate sump before showering which accumulates grey water into a separate box before discarding overboard. Automatic float switch draws water to ultimately drain out the sink.



Shower nozzle

Sump pump

Head/Holding Tank- Wildflower has a Jabsco marine toilet emptying into an 18 gallon holding tank located forward under the v-berth port side. Plan on 3 gallons/per person /per day capacity which means pumping out approximately every other day on an extended trip. Press the tank monitor "Read" button to see the current level. Stop using when red "full" light comes on or it could damage the system! There is access to overboard discharge from the tank but this has been disabled for club usage since it is illegal if you are 3- miles from any shore. You must use the tank any time you are in Puget Sound.

Please follow the steps below for proper head use (instructions also next to head)

- 1) Open seacock for intake
- 2) Move wet/dry bowl selector to **flush** (**towards handle**) and pump handle to add water to the bowl prior/following use.
- 3) Move wet/dry bowl selector to **dry** bowl (**away from handle**) after flushing and continue to pump until toilet bowl is empty.
- 4) Leave wet/dry bowl selector in dry bowl position when toilet is not in use to avoid filling of toilet. Close seacock for safety.



Overboard Discharge Seacock (under sink) Head Intake Seacock (under v-berth)



Manual holding tank pump-out w/handle

18 gallon Holding Tank

Head/Holding Tank (cont.)

Precautions

ONLY flush organics down toilet. No toilet paper or paper of any kind. Instead, discard in ziplock bags in the garbage.

Anytime handle will not flush do not force! May be plugged or worse, holding tank is overfilled. IF VENT HOSE PLUGS UP, FORCING PUMP HANDLE MAY BUST OPEN FITTINGS. Tank is hard to access so plan routine pump-out stops to avoid overfilling.

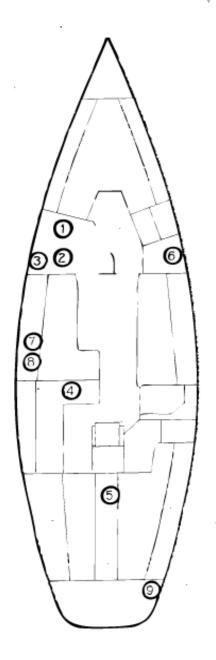
Remember!!

You are responsible for bringing the boat back empty after an overnight charter. Please comply with club rules and pump out tank before docking at home. Thanks!

Steps to Pumping out the Holding Tank:

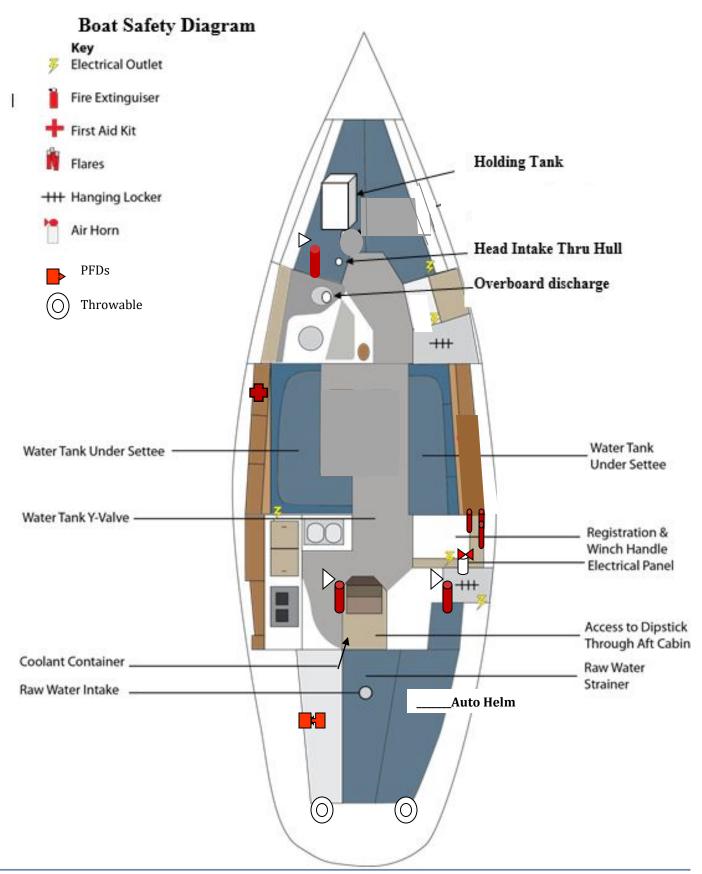
- 1) Locate "Waste" deck plate and plan your docking approach to the pump-out station accordingly.
- 2) Tie Bow/Stern and spring lines to assure your boat is stable before beginning to pump out tank.
- 3) Locate deck key and open fitting making sure not to drop overboard!
- 4) Run pump hose into water, open valve and prime with seawater by pushing the green button to turn on. Close valve. Turn off (red button)
- 5) Secure pump-out hose nozzle into deck fitting holding downward during the entire pump-out process to assure there are no air leaks for fluid to escape.
- 6) When secure, turn on pump. Continue pumping until clear bubbles appear. Turn off.
- 7) Close valve and gently remove fitting from deck plate. Flush nozzle/hose with salt water before wrapping up hose.
- 8) During our summer months it is best to fill the holding tank with fresh water and repeat flush to keep tank from getting smelly! Also, the tank gauge will not read "empty" until you flush tank at least once.
- 9) Replace deck cap. Hose off deck. Wash hands.

**Thru Hulls Diagram



- O 3/4" HEAD INTAKE W/ STRAINER
- 1-1/2" HEAD OVER-BOARD DISCHARGE
- 3/4" SINK DRAIN W/ SEACOCK
- 4 1-1/2" SINK DRAIN W/ SEACOCK
- 5 3/4" ENGINE INTAKE W/ STRAINER
- 6 3/4" LOCKER DRAIN ABOVE LWL
- 3/4" SUMP PUMP DRAIN
- 1-1/2" BILGE PUMP DRAIN ABOVE LWL
- 9 3/4" PROPANE LOCKER DRAIN ABOVE W/L

^{**}May vary per J-35c so always find thru-hulls on each vessel per usage.



Anchor System

Wildflower is equipped with a 10kg (22lb) Bruce anchor with 200' of chain and short nylon tail ½". Chain is marked with black tape every 20'. The secondary anchors are a Fortress FX16 Danforth in starboard deck storage and a large Danforth w/extra time in port cockpit locker.

There is a Lewmar V700 electric windlass on *Wildflower* designed to bring the anchor down and up. To lower anchor, first turn all battery breakers on then control pace of outgoing chain by running at 5 second intervals. The windlass breaker is located in the aft cabin next to the outlet to starboard. The windlass operates with remote, foot switches or switch in forward cabin. The remote is stowed on the bulkhead in the forward cabin to starboard. Wildflower draws 7.0 feet so best to allow for a minimum of 10 ft. clearance. Never anchor in less than a 3:1 ratio line to water depth 4/5:1 is best 7-10:1 for storms. Once the anchor is set, secure a snubber line to remove strain from the windlass overnight.

To hoist anchor, first turn all battery breakers on. Next, start up the engine to reduce load on the batteries. Now flip on the breaker for the windlass located in the aft cabin next to the outlet to starboard. Finally, operate windlass from the foredeck with the "up" foot pedal or with the wireless remote. The remote is stowed on the bulkhead in the forward cabin to starboard. Have a second person monitoring chain as it fills the anchor locker.

Important tips:

- -When hoisting the anchor, always move boat forward with engine, not windlass. It is only designed to lift weight of anchor and chain.
- -Make sure as chain comes into anchor locker, it is not piling up under windlass and jamming system. If so, stop and push chain away from moving parts as necessary.
- Anchor windlass lowers *and* raises anchor. Refer to manual. Operate very carefully! Take your time! Especially slow down as anchor breaks surface so it doesn't swing wildly and damage the gel coat.
- -Also, in v- berth, slide anchor locker cover UP before trying to pull OPEN. The hatch will break if you force it. See diagram on locker cover.

Remember: Anytime the windlass breaker triggers, something was overloading the system. Double check tension points before resetting. Always wear gloves when working the anchor system and never grab a chain if it is running free! Let it run out until it stops, then readjust scope as needed. Make sure to tie anchor in after hoisting before motoring on!



Bruce anchor Windlass w/foot switch Secondary Danforth stowed stbd. w/ drain seacock

Sails and Rigging

Wildflower is a J-Boat. Designed as the perfect performance cruiser she sails like a dream. Full sail can be carried in up to 18 knots especially since the mast is set slightly forward of center.

Main Sail adjustments- Outhaul and Cunningham adjustments are forward. Boom vang adjustment runs to a deck clutch on port outboard of the companionway. Backstay operates with a handle and numeric gauge. Never over-tighten and risk damage to rig. Main sheet has a double winch system. Make sure to safely cleat both sides during operation. Same with the traveler. Always control the main sheet during a jibe to protect the instruments at the helm. There is no boom topping lift as the boom is held up by the rigid boom vang. The spinnaker topping lift leads to a starboard clutch by the companionway.



Port Starboard

Sails and Rigging



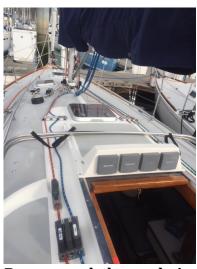


Mainsheet/Traveler

Wildflower jib and main sheet winches



Outhaul



Boom vang led to cockpit



Back stay

Raising and Lowering the Main

Raise the main about 30 degrees into the wind with the boom vang and main sheet eased. Keep both main sheet clutches closed with a triple wrap on the main sheet winch for extra leverage. This is a heavy main and takes a bit of elbow grease to hoist. There is a low and high gear on the winch. When lowering the main simply head directly into the wind and let the sail drop onto the boom in parts. Tie sail ties as you go. Make sure battens are not twisted before tying down the sail. They should rest on top of the boom (not hanging off to the side). Stow main halyard away from the mast after use as it chafes if allowed to slap against mast on a windy day.

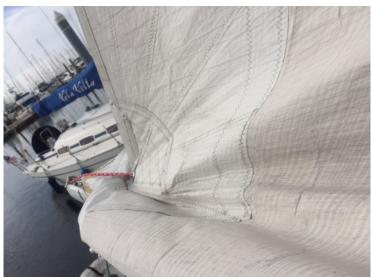


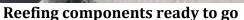
When raising full main make sure reefing lines are free

Main reefed at first reef point

Reefing the main

When the wind forecast calls for strong winds or you feel uncomfortable in the current conditions, reefing the main sail is a good option to decrease the boats power. The main has two reef points but only one reefing line (red) running along the boom forward then aft along the deck to a winch on starboard accessible from the companionway. See diagram below. There are reef hooks on port and starboard near the gooseneck fitting and reefing cringles on the sail for easy access. **Important:** Before leaving the dock make sure reef line is ready to go through grommet then tied with a bowline around the boom. See diagram and pictures.







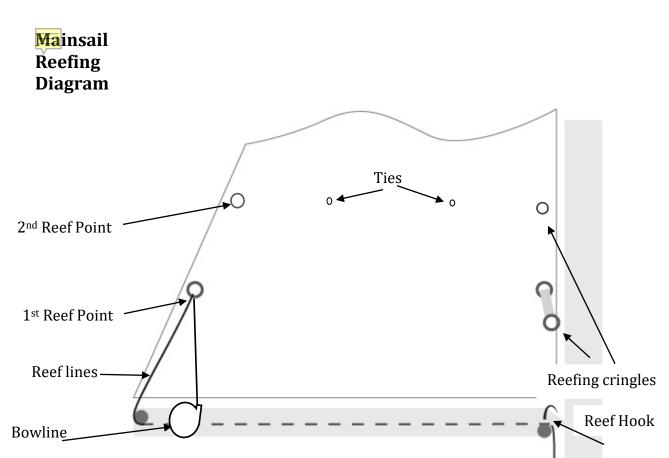
Reefing line clutch



Reef hook and cringle

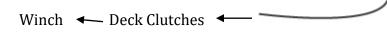


Reef tie around sail only-not boom



Steps to Reefing the Main:

- 1) Let wind out of main (head upwind, sheet out or heave-to)
- 2) Ease main sheet and boom vang
- 3) Ease halyard to desired reef point and hook reef hook into cringle
- 4) Re-tension halyard
- 5) Tighten associated reefing line until new clew is touching boom and pulling as new outhaul.
- 6) Finally, run ties through mid-sail to secure pocket. Ease/stow jacks.



Remember! Be careful when tying reef ties not to over secure and cause damage to the sail. Only run ties around the sail, not the boom as this can stress or rip the sail. If unnatural "V" creases appear, ease lines slightly to avoid tearing sail at these points. Also, do not over tighten the reefing line! If you see creases, ease so as not to rip out the grommet.

Roller Furling Headsail- Working as a genoa or any number of shorter sail sizes, this furling system works well. Best to ease the furling line slowly by keeping a little tension on the furling line when opening the sail on windy days to avoid a snarl (override) up front. Also, furling the sail works easier if you head downwind to a broad reach on a windy day. This reduces the apparent wind and keeps the sail from over-tightening while furling. Never force the system with a winch as you may break things! Look up to make sure you didn't catch the spinnaker halyard in the furl.

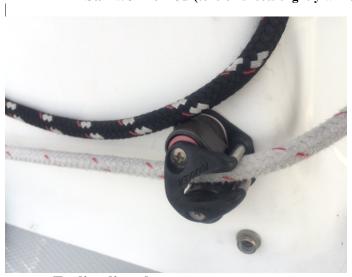


Furling Drum



Adjustable fairleads to cockpit

Sail well-furled (tension sheets slightly while furling)



Furling line cleat on port

Securing Wildflower at the end of your sail

Disembarking

When you are done sailing for the day, it's time to make sure the boat is ready for the next person. Follow the securing checklist! Extra checklists are found at the beginning of this Boat Manual.

Especially complete the following procedures:

- -Make sure to clean up any mess, crumbs, dirty dishes, bottles or dirt that may have been overlooked. Bring garbage with you!
- -Fold and cover sails
- -Put all 3 fenders up amidships on each side of the boat, and seed re forward and aft spring lines. Please use the docking cleats amidships and not the shrouds to attach spring lines. If docking lines run over the toe rail they will chafe and damage the lines and rail.
- -Turn off DC switches
- -Plug in shore power with all breakers off for safety. Once connected, turn on the AC breaker then turn on the battery charger switch on the AC panel
- -Turn on the Outlets switch and Make sure the main knob on the heater is set to "on" and low setting. Please place heater in a safe place.
- -Remember to hose down the boat the get all the salt water off.

Turn in the completed checklist!



Anacortes Specific Information

The key for the boat can be found in the propane locker (please return it to the propane locker when done)

While in Anacortes Wildflower will have: 8 adult life jackets A dinghy and oars Ample propane for the galley

The below listed "consumables" and amenities should not be expected aboard this boat. (Please be prepared to supply your own.):

Paper towels/Toilet paper/Kleenex Small green propane canister Dish Soap Dish towels **Hand Sanitizer** Flash light Charts Lighters

Tools (if you have any issues, notify Sailing Club Staff)

There is no bedding onboard

Boat Manual/Quick Start Guide

J35C -Wildflower

Boat Manual/Quick Start Guide