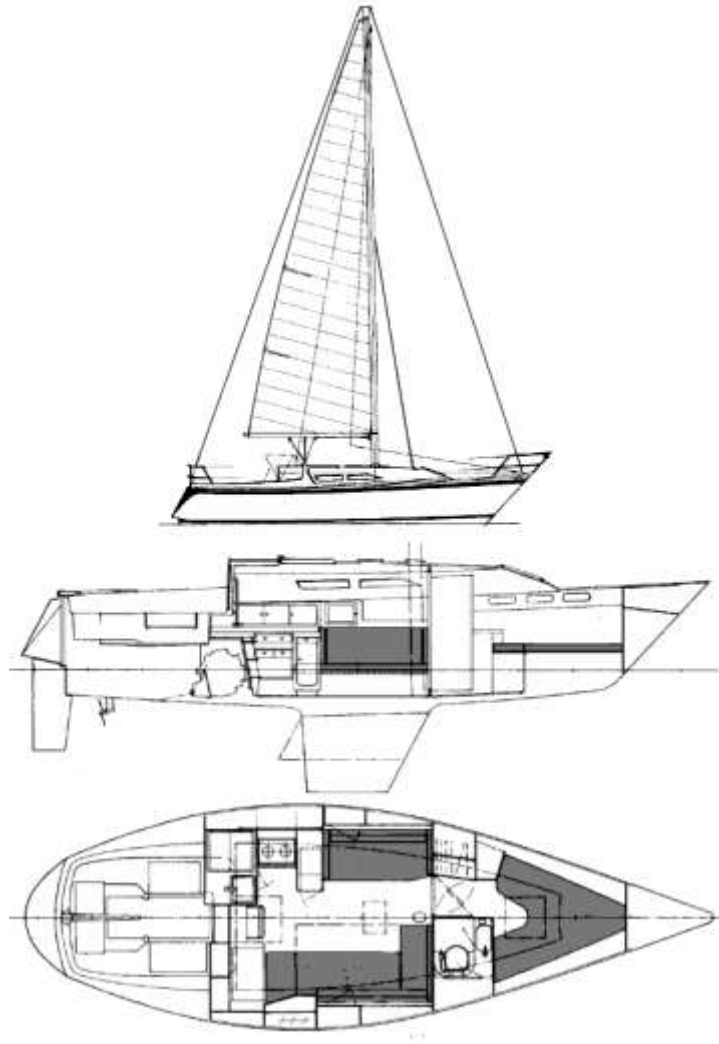




Delphinus Boat Binder

2024



Table Of Contents

1	QUICK REFERENCE BOAT INFO.....	4
2	BOAT CHECK CHECKLIST	5
3	STEPS TO GO SAILING	6
4	SNUGGING DOWN AFTER SAILING	7
5	NOTMAR(S)	8
6	LIST OF LIGHTS BUOYS AND FOG SIGNALS	9
7	VESSEL LICENCE(S)	10
8	INCIDENT REPORT	11
9	STABILITY REPORT	12
10	CONTINGENCY PLAN	13
11	SAFETY EQUIPMENT AND COMPLIANCES	14
12	THROUGH HULLS.....	15
13	SAFETY EQUIPMENT CHART	16
14	STANDING RIGGING	17
14.1	SPECS	17
14.2	FORESAIL FURLER INSTALLATION	17
15	RUNNING RIGGING	18
16	DECK GEAR.....	19
17	SAILS	20
17.1	DEFINITIONS	20
17.2	MEASUREMENTS	20
17.3	MAINTENANCE	20
17.4	SAIL REPAIR IDENTIFICATION FORM.....	21
18	ENGINE.....	22
18.1	SPECS	22
18.2	ENGINE STARTUP PROCEDURES.....	22
18.3	ENGINE STOP PROCEDURES.....	23
18.4	WINTERIZING	23
18.5	SERVICE SCHEDULE	24
19	ELECTRICAL.....	25
19.1	ELECTRICAL COMPONENTS.....	25
19.2	DC ELECTRICAL STARTUP PROCEDURES	25



19.3	AC ELECTRICAL STARTUP PROCEDURES	25
19.4	ELECTRICAL SHOREPOWER CHARGING.....	26
20	ELECTRONICS.....	27
20.1	ELECTRONIC EQUIPMENT	27
21	PLUMBING	28
21.1	FRESH WATER	28
21.2	HEAD	28
21.3	WINTERIZING	28
22	STOVE	29
22.1	TURNING THE STOVE ON	29
22.2	TURNING THE STOVE OFF.....	29
22.3	TURNING ON THE OVEN	29
23	HAULOUT / LAUNCH PROCEDURES	30
23.1	MAST SETUP	30
23.2	STEPPING THE MAST	30
24	ALARMS	31
25	WHAT TO DO IF SOMETHING BREAKS	32
26	UNDOCKING / DOCKING.....	34
27	CO-OPERATIVE SAILING PROGRAM	36



1 QUICK REFERENCE BOAT INFO

BOAT INFO	BOAT NAME	Delphinus	
	Year	1983	
	Model	CS33	
	Hull #		
	Licence #	ON8280594	
	Length	32.67'	9.96m
	Beam	10.67'	3.25m
	Water Draft	4'9"	
	Air Draft		
	Displaced Tonnage	10,000lbs	4,536kg
	Vessel Loading	Not to exceed 6 persons or 578 kg	

TANKS	Water	Tank 1	Tank 2
	Gasoline Fuel	24 gallons	91 litres
	Waste	32 gallons	

MISC	Dinghy	Inflatable soft bottom
	Dinghy Equipment	Anchor, throw line, whistle, foot pump

COMMS	MMSI #	316049116
	Call Sign	Delphinus



2 BOAT CHECK CHECKLIST

Every time a Skipper takes a boat out for a sail, they are to complete the Boat Check Checklist. The items on the list are to be checked prior to heading out and also upon return to make sure that the boat is ready for the next group.

If anything is missing from the list it is up to the Skipper to decide if the boat is sufficiently prepared to head out. Deficiencies in the list are to be noted in the deficiencies log and noted with the boat captain by email immediately. This is the only way they can be rectified, and safety of the vessels maintained.



3 STEPS TO GO SAILING

Please follow this procedure before you cast off. If there are any deficiencies, please note it in the deficiencies log book and report it to the boat captain, immediately.

Steps to Get Ready to Sail – Delphinus

Checklist Items	
1.	Open up boat and stow companionway boards in the port locker
2.	Confirm boat was charging via shore power
3.	Turn the AC panel at the boat off, labelled <i>AC Power On</i> , found in the top right corner of the panel
4.	Disconnect shore power and either stow onboard or on the dock.
5.	Check for water in bilge. Vacuum out any water in the bilge if it is too low for the pump
6.	Turn on DC power and set to Battery S for diesel start. Battery H is for House. For all the steps, see the electrical section
7.	Confirm Bilge Pump set to AUTO, labelled <i>Bilge Pump Auto</i> on the far left side next to the DC panel.
8.	Complete Boat Check Checklist document
9.	If taking Delphinus overnight, file an ABYC Sail Plan https://abyc.ca/docks/abyc-sail-plan/
10.	Store sail cover down below
11.	Check there is oil in the engine between the marks on the dipstick
12.	Check the engine overall for anything that looks out of place
13.	Check the sea strainer for weeds/clogging
14.	Ensure that the water intake is always open
15.	Check you have enough diesel for your trip
16.	Prepare halyard and sheets
17.	Start diesel engine. see Startup Procedures
18.	Check for water circulating and pumping out the side of the boat.
19.	Cast off
20.	Once engine is off, switch DC power to Battery H (to avoid draining Battery S for engine start)
21.	Remove fenders
22.	Store all lines and fenders in the boat.
23.	Enjoy your sail



4 SNUGGING DOWN AFTER SAILING

Please complete the following steps before you leave the boat to ensure that the next person can also enjoy their time onboard. If there are any deficiencies, please make sure to note it in the deficiencies log book and tell the boat captain immediately.

1.	Prior to docking, if you have used the head, complete a pumpout either with the gas dock or the honey wagon.
2.	Plug the boat in and confirm it is charging via shore power. Follow the steps in the Boat Binder.
3.	Check for water in bilge and vacuum out. Note in checklist how much water and let the boat captain know
4.	For outboard motors, raise the motor following the procedures in the motor section of the Boat Binder.
5.	Confirm Bilge Pump set to AUTO
6.	Complete Boat Check Checklist document back side of the page.
7.	Have a quick visual of the engine to ensure nothing looks out of place.
8.	Close up the companionway



5 NOTMAR(S)



6 LIST OF LIGHTS BUOYS AND FOG SIGNALS



7 VESSEL LICENCE(S)



8 INCIDENT REPORT



9 STABILITY REPORT

Delphinus is rated in a stability index report completed in 2023, stating the following:

Capacity is not to exceed six (6) at 75kg per person or total weight of 578 kg.



10 CONTINGENCY PLAN



11 SAFETY EQUIPMENT AND COMPLIANCES

Delphinus is a Pleasure Craft Licensed vessel berthed at ABYC which is in the Toronto Harbour. As such, she is required to be compliant with the Transport Canada Pleasure Craft regulations. Please see the following for the list of required compliances.

- Canada Shipping Act
- Competency of Operators of Pleasure Craft Regulations
- Small Vessel Regulations
- Charts and Nautical Publications Regs
- Ship Station Regulations
- Vessel Pollution and Dangerous Chemicals Regulations (Environmental Protection Act Reg 343)
- Vessel Operation Restriction Regulations
- Toronto Harbour Regulations

While Delphinus is operating as a Coop vessel, you are the operator of this vessel. As such, it is your responsibility to ensure compliance with all of the required regulations. If a vessel is inspected by local authorities and found to be deficient, you as the operator are held accountable. Please make sure you give the boat a full Boat Check before heading out. See Boat Check Checklist attached on the following page, along with Through Hull diagrams and Safety Equipment diagrams.

While Delphinus is operating as a sailing school vessel, she shall be maintained in compliance with all of the required regulations above and the Recreational Boating School TP15136.



12 THROUGH HULLS

See diagram on bulkhead adjacent to safety equipment list for through hull locations. All through hull valves should be exercised before heading out.



13 SAFETY EQUIPMENT CHART



14 STANDING RIGGING

14.1 Specs

Standing rigging is 1x19 316 stranded wire.

1 – Mast

1 – boom

1 – removable babystay.

In line spreaders

2022 – new forestay and furlex furler

2023 – all standing rigging was replaced. Backstay was lengthened to remove the extra toggle.

14.2 Foresail Furler Installation

Furlex furler

Furling line goes to starboard

Pin to pin measure is 44'8"

Link plate 4.5"



15 RUNNING RIGGING

The running rigging includes the following:

RIGGING	SPECS	LENGTH	REPLACED
Jib Sheets			
Jib Halyard stbd			
Port jib halyard			
Main Sheet			
Main Halyard			
Spinnaker halyard			
Topping Lift			
Downhaul			
Spinnaker Sheets			
Backstay			
Traveller			
Vang			



16 DECK GEAR

Delphinus has very simple deck gear original from factory. Hand jammers are utilized for all running rigging.

She has a full set of canvas enclosure for the boat as well, but no sidewalls

Mainsail utilizes lazy jacks.

There is a wisker pole



17 SAILS

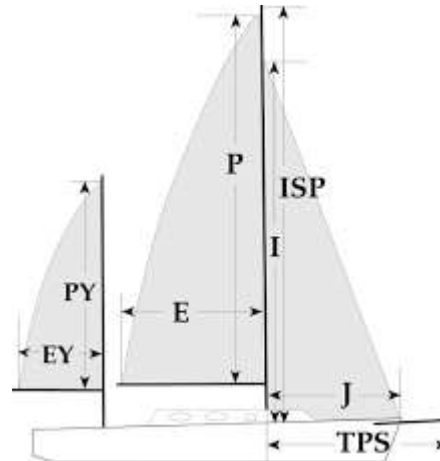
17.1 Definitions

J1 = genoa

J2 = smaller genoa

J3 = Jib non overlapping

- Measurements are "pin to pin"
- Sails have been stretched loosely by hand to take measurements.
- No cord measurements have been taken into account



17.2 Measurements

SAIL	LABEL	SAIL #	MANUFACTURER	DESCRIPTORS	FOOT	LUFF	LEECH
J1	spare		Hood		10'9"	36'9"	39'
J1					17'	38'	41'7"
Main							
Main	spare		North Sails		10'11"	38'10"	37'2"

17.3 Maintenance

Sails are inspected for service after the masts are pulled in the fall and sent to the loft (North) for service as needed, annually. If a sail needs to go to the loft during the season, a replacement sail needs to be bent on so the boat remains in service.

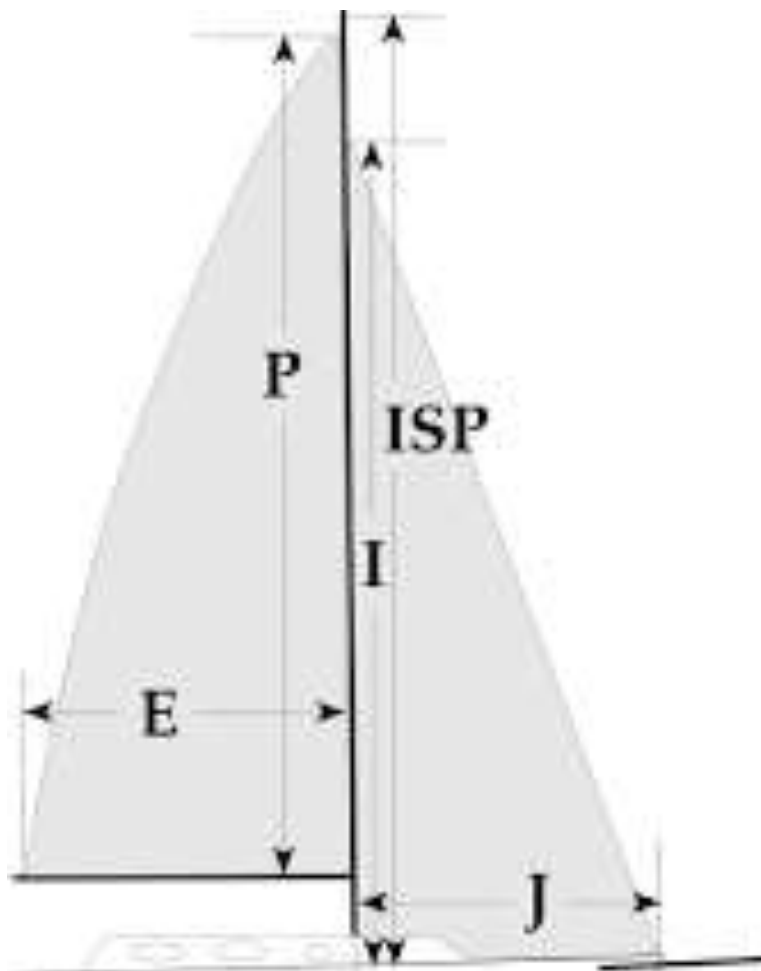


17.4 Sail Repair Identification Form

The Sail Repair Identification Form is an easy form to mark up exactly where and what the damage is on the sail, before it goes to the loft for repairs. Please mark the form and take a picture and send it with your email to the Lead Instructor or Boat Captain to forward to Maintenance.

Ashbridge's Bay Yacht Club 30 Ashbridge's Bay Park Road
c/o Diane Reid 4168782677

Boat Name: _____



notes



18 ENGINE

18.1 Specs

ENGINE	Bukh DV20 1983 20hp
IMPELLER	Jabsco Profile D 22405-0001-P
FUEL	
RACOR WATER SEPERATOR	R15T
FUEL FILTER	
OIL FILTER	FRAM PH3816
OIL	SAE30 3 LITRES
PROP	
CUTLASS BEARING	
ENGINE HEAT EXCHANGER COOLANT	
Belt	
Propeller	3 blade bronze
Outboard Engine	Evinrude 6HP 4 stroke Serial # H09457934

18.2 Engine Startup Procedures

Engine should be checked every time you start the engine to head out on an adventure.

1. Isolate the master switch to OFF
2. Check raw water intake valve is open and sea strainer is clean.
3. Check oil is full between dipstick marks.
5. Check belt tension is sufficient. A good rule of thumb is .5" deflection over a 12" run from pulley to pulley. Check belt has no apparent wear and tear.
6. Check engine bilge contents, empty and clean it. Make note of any contents in the deficiencies log.
7. Check for obvious leaks and corrosion
8. Check for damage to electrics
9. Check sufficient fuel for the trip.
10. Engage the master switch to S to start the engine.
11. Ensure throttle control is in low to medium throttle by pushing it all the way forward then pulled back an inch or two. Throttle is on the starboard side of the



- pedestal.
12. Ensure engine is in neutral. The shifter is on the port side of the pedestal.
 13. Ensure the fuel kill switch (white toggle on the left of the startup panel) is pointed up.
 13. Push and turn the key to aux position. You will hear a whistle for low oil pressure.
 14. While the engine is whistling, continue to push and turn the key to start the engine. You may have to give it a little throttle to get it started, but she usually starts quite nicely. If she doesn't start, check neutral on the shifter, white toggle is pointed up and fuel in the tank. If the problem persists, call the boat Captain and make a note in the discrepancies log.
 15. Check for water circulating and pumping out the side of the boat.
 16. Being careful not to hit the dock, check that forward and reverse work and that the engine will stay running under load and not die. This could happen on cold days. If you hear it coughing and spluttering, let it warm up some more.

18.3 Engine Stop Procedures

1. Ensure transmission is in neutral
2. Flip the white toggle down. The engine will shut down as it gets starved of fuel.
3. Turn the key to off and replace it to the nav station pencil drawer.
4. If you are sailing, turn the battery switch to H for house. If you are at the dock, turn the battery switch to off when you are done with the boat.

18.4 Winterizing

The engine is winterized each year in the fall. This includes an oil change while in the water and circulating engine antifreeze once hauled out.

Steps to winterizing the engine:

1. Remove the sea strainer's strainer and clean it.
2. Remove the water from the sea strainer.
3. Remove the out line off of the sea strainer. This will be your pickup for the antifreeze.
4. Hold the line and jug up high and use a funnel or the engine will not pickup.
5. Circulate 2 jugs of diluted antifreeze and then one jug of 100% antifreeze.
6. Catch the antifreeze out the stern tail pipe.
7. Remove the impeller for inspection. Replace annually.
8. Note in the Maintenance Log.
9. Add any leftover antifreeze to the sea strainer to keep the top gasket lubricated from drying out.



18.5 Service Schedule

Service	When
Oil change	Late fall while in water, annually
Impeller replaced	During winterizing annually
Belt – alternator	
Belt – water pump	
Sea strainer	Annually or more frequently
Stuffing Box	
Heat Exchanger flush	No coolant, just a bypass for hot water.
Thermostat	Replaced winter march 2023

Thermostat notes

In march 2023 the thermostat was removed for replacement. 2 bolts broke off. Both on the port side of the housing. The forward bolt hole now has the tip of an easy out stick in it. The bolt for that hole is shorter. While retapping the two holes, the aft port side hole did not center. As such, the housing was over sized and in doing so, the aft port side hole in the housing broke through the wall. JB Weld has been applied until a new housing is installed. The new housing will need all 4 holes oversized for clearance to accommodate the slightly out of center engine block blind holes.



19 ELECTRICAL

19.1 Electrical Components

Delphinus has a 12 volt DC system and a 110 AC system. Both have dedicated panels on the starboard side at the nav station. The master switch is located on the starboard side of the companionway stairs. There are three DC deep cycle batteries located in the quarter berth that serves the house system and engine. The electrical system has been upgraded a few times over the years with various modifications.

170 amp hours house – marine deep cycle

1000 CCA start – marine

Wiring Colour Code Base of Mast

To be updated

19.2 DC Electrical Startup Procedures

1. Turn master switch to H for house.
2. At the DC distribution panel, turn on the item you want to use.
3. If the item does not turn on, then go to the item and push/turn the power button for it. It may not come on automatically when you turn it on at the panel.
4. When shutting down the DC, turn all of the switches on the panel off first with the red toggle for each and then turn the master switch off.

19.3 AC Electrical Startup Procedures

The AC on the boat only supplies outlets for use while on shore power.

1. Turn the breaker for the AC on the boat off along with the breaker on the



- electrical pedestal on shore.
2. Plug shorepower into the receiver in the cockpit and then the electrical box on shore.
3. Turn on the breakers for the AC on the boat and on shore.
4. Ensure AC outlets and AC Converter switch is on at the panel.
5. Use the outlets, but be sure not to overload them and trip the breaker. They are only good for items that draw low power.
6. When shutting down disconnect from the outlets and then turn off the AC panel.

19.4 Electrical Shorepower Charging

1. Follow the steps for AC electrical startup.
2. With the shorepower engaged, on the AC panel, turn on the reverse polarity double pole breaker. Turn on the "converter". The battery should start charging automatically when the boat is plugged in. You will hear it humming under the quarter berth.



20 ELECTRONICS

20.1 Electronic Equipment

Delphinus' electronics are as follows. Manuals can be found on the shelf.

- Raymarine knotmeter and depth meter. 2015
- VHF Marine radio with DSC
- Raymarine autopilot
-



21 PLUMBING

21.1 Fresh Water

Delphinus has 2 freshwater tanks. One on starboard and one on port in the main salon. There is an isolation manifold in the cabin sole of the main salon. The system services two sinks, one at the galley with a hand pump and one in the head. The hand pump is also the vent for the tanks when filling. The boat has pressure water which services the galley and head sinks. The water system is used a lot, but the tanks are old. Feel free to bring water onboard for fresh water drinking. The tanks have been flushed and treated with bleach.

The hot water tank does not appear to work from shorepower. In the interim, hot water can be created through the heat exchanger on the engine. To get hot water, run the engine for 20 minutes. This is yet to be confirmed.

21.2 Head

The toilet is maintained for active use. The holding tank is in the V berth. To use the toilet:

1. Open the water intake
2. Ensure the pump lever is in the wet bowl position
3. Add some water to the bowl to facilitate future flushing
4. Use the toilet. Nothing goes in the toilet that didn't pass through you. The plumbing is very old and easily clogged.
5. Once finished using the toilet, pump on the wet valve to flush the contents through. Pump 20 times to ensure that it has gone into the holding tank.
6. Flip the switch to dry and pump the bowl empty.

The toilet needs to be pumped out during the summer. This needs to be recorded in the Maintenance Log.

There is a shower in the head. It has a sump. The sump is controlled by a green rocker switch on the panel. Presently the shower sump leaks air. The pump is scheduled for replacement.

21.3 Winterizing

Bypass and check valves have been installed on both tanks.

The hot water tank is joined with two grey lines under the main salon floor boards. There is a small manifold here to choose between tanks. They point in the direction of the tank they service.

A bypass has been installed on the bottom of the hot water tank for winter servicing.



22 STOVE

22.1 Turning The Stove On

1. Ensure the knobs on the stove are in the off position
2. Go to the hump in the stern of the boat in the cockpit, lift the hump off and open the valve on the top of the tank. You may smell a little propane. This is not unusual.
3. Go to the panel and turn on the switch for the stove.
4. Ensure that the sniffer is on.
5. Have matches ready.
6. Light the left hand burner by holding the knob in and at the ignition position. The gas moves slowly and the sparker is slow, but it does work. If it doesn't light after 5 seconds then light a match first then turn the knob to ignition with the lit match at the ceramic where the gas comes out. Watch you don't burn your fingers. Hold the match horizontal.
7. Once the element is lit, rotate the knob to the desired heat setting.
8. For the right hand burner, the ignition doesn't work. Use the match sequence in step 6.

22.2 Turning The Stove Off

1. Turn off the tank
2. Watch the flame on the stove flicker out.
3. Turn off the knob on the stove
4. Turn off the switch on the DC panel.

22.3 Turning On The Oven

1. Inspect the oven and find the burner underneath. It is a long bar. Oven burners are notorious for needing to heat up once they are alight. Be prepared to hold the knob in for 20-30 seconds.
2. Follow the procedures in 20.1 steps 1 through 5. You will be lighting the burner directly in the oven.
3. With your match / flame already lit and very close to the burner, push and turn the oven knob to ignition. The burner will light up with the blue flame, but if you let go of the knob, the flame will go out. You need to hold the knob in the ignition position for 20 to 30 seconds until the burner has warmed up
4. When you feel confident that the element has warmed up, rotate the knob to the desired heat setting. Full blast initially is usually best to really ensure it gets going.

NOTE

There is a fuse on the back of the stove.

All propane service was replaced in spring 2023



23 HAULOUT / LAUNCH PROCEDURES

See Yearly Maintenance Checklist for details of what is to be done

23.1 Mast Setup

The mast

23.2 Stepping The Mast

1. Insert spreaders ensuring they taper aft and pin them.
2. Insert cap shrouds through the forward holes in the spreader tips and tape.
3. Tape the spreader boots and cap shrouds in place for anti chafe with vinyl tape.
4. Install the mast head fly and tape the base screw so that it won't shake loose.
5. Hoist the mast with a strap pulling the hoist sling down to the lower section of the mast, preventing the lift from loading on the spreaders or damaging the steaming light.
6. Lift the mast in place being careful while lowering it into the keel step.
7. Place the plastic white partners at the base of the mast to secure it from shifting
8. Place the wood deck partners matching the profile to the mast.
9. Connect the two hooked deck collar ties to the mast with the through bolt.
10. Connect all shrouds strongly hand tight or with a few turns of the turn buckles with leverage.
11. Proceed with dock tuning.
12. Connect the steaming and anchor light electrical through the white puck on deck.



24 ALARMS

There is a sniffer alarm for the solenoid. This was serviced in 2023.



25 WHAT TO DO IF SOMETHING BREAKS

If something breaks onboard, please manage as best you can to get back to the dock safely. If you can not manage, please seek what you feel is appropriate help while on the water.

Once ashore, please:

1. Inform the boat captain of the problem
2. Make a note in the maintenance log for the next person coming to use the boat.
3. If you think the circumstances are critical and the boat should not go out, please telephone the boat captain directly or receive an email confirmation that they have the information. The boat captain will pass the info along through the online form. There is a sign on the boat that can be hung on the wash board stating "out of service".



OUT OF SERVICE



26 UNDOCKING / DOCKING

These steps assume a minimum of 3 people on the boat. As always, practise makes perfect. Prudence is taken to prevent collisions and to not wrap mooring lines in the propeller.

Undocking

Prep the crew as follows.

- Plan to motor the stern into the wind if you can.
 - Give yourself as much distance as possible to get the boat moving forward after you have backed out of the slip.
 - If needed, with outboard engines, turn the engine by hand to help facilitate turning.
 - Steer before gear.
 - Tell everyone the plan
1. Place one person at the bow lines
 2. Place one person on the windward stern line who is mobile
 3. Place one person on the engine and the leeward stern line.
 4. Cast off the leeward stern line into the tire or on the adjacent boat as it is not being used
 5. Engine in reverse
 6. Cast off the bow lines
 7. Windward stern line gets walked forward to the shrouds then dropped into the tire or on the boat adjacent.
 8. Continue backing until you have enough room in front of you to go forward and to leeward.



Docking

Prep the crew as follows:

- Boat hook for the bow and for the windward mooring line
 - One person on the bow lines
 - One person on the windward tire mooring line
 - Ignore the leeward mooring line until last.
1. Approach the mooring, holding the boat close enough to the windward tire that the line can be picked up by the boat hook.
 2. Look at the leeward mooring tire to see where the line is to ensure that you don't have the motor in gear as you run it over.
 3. Have the bow lines person fend off to leeward and then walk to the bow to catch the bow with the handrail on the V dock.
 4. Pick up the leeward stern line
 5. Once the V dock and stern tire lines are in hand, ease the bow lines and pull back on the stern lines



27 CO-OPERATIVE SAILING PROGRAM



End of Document