

Pathfinder Winterizing

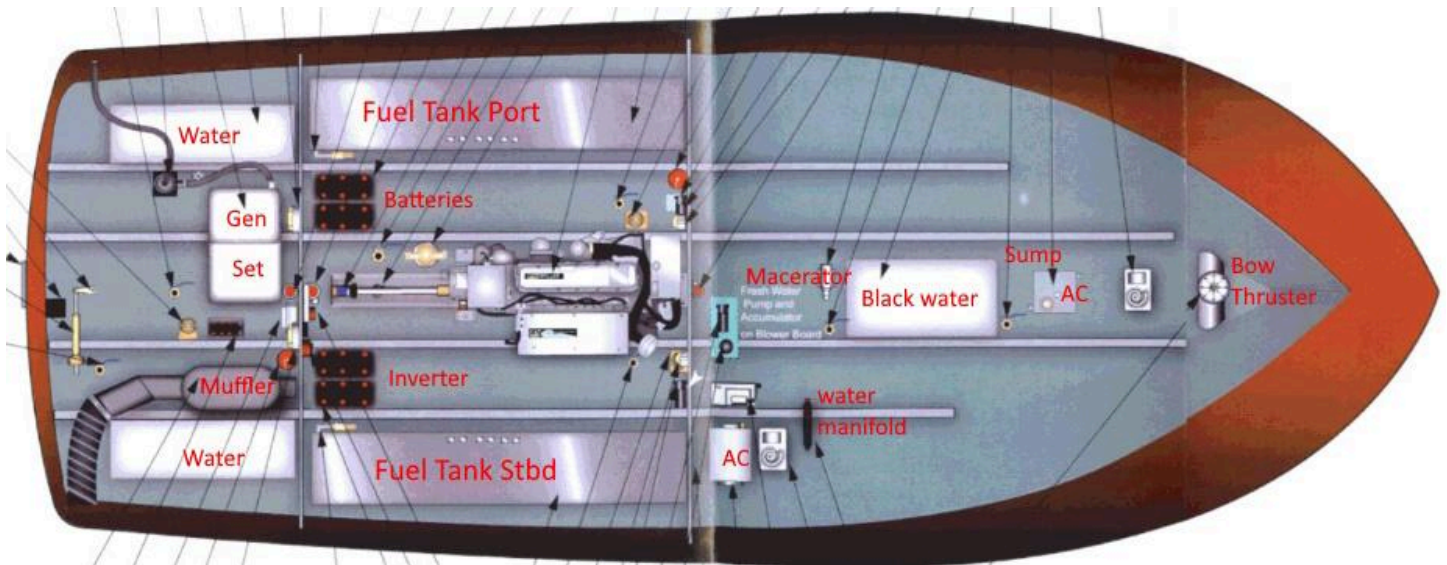
Each year, Pathfinder is prepared for the winter. This has included:

- Flushing potable freshwater systems with potable antifreeze from water tanks in lazarette
- Flushing AC, Head, and Raw water washdown with antifreeze from thru hulls
- Flushing antifreeze through the engine and genset thru hull intake and running engine and genset up to operating temperature
- Changing oil and oil filters on engine and genset
- Removing the white oil absorbing cloths from under engine and replacing with clean cloths
- Lubricating all seven thru hull seacocks and four strainers so they open easily
- Replacing fuel filters on engine and genset
- Replacing zincs on engine and genset
- Disconnecting both main batteries and genset battery
- Making sure boat has the bow tilted up and removing garboard plug so bilge drains
- Checking and replacing zincs on propeller shaft and on stern under swim platform
- Shrink wrapping from October through May



Pathfinder Mainship 400 Systems

- Potable water systems
- Salt water systems
- Diesel fuel systems
- Propulsion systems - Engine & Bow Thruster
- Electrical systems & Genset
- Communication systems
- Navigation systems
- Fire suppression system



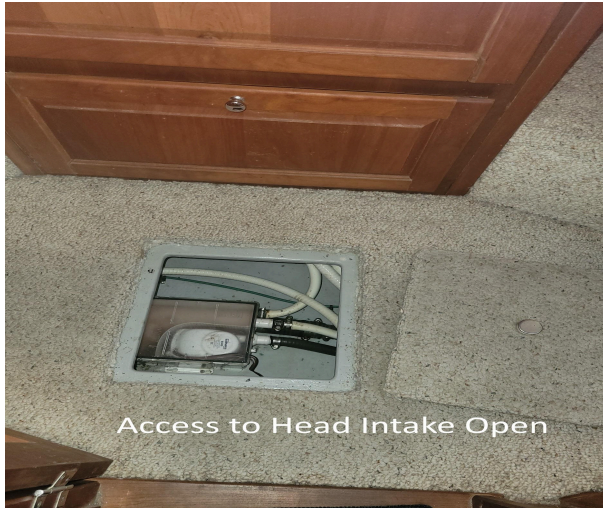
Potable water systems

- Two 65 gallon water tanks are in stern lazarette and filled from port and starboard aft rail.
- Water heater Atwood 6 gallon 220v EHM6-220 Serial #94590005913.
- Hose intake bypassing tanks is at stern above swim platform
- Water tanks need to be drained before storage.
- Water manifold is under the lower helm station.
- Cold water is running to the head sink, head shower, galley sink, aft washdown in aft compartment, summer kitchen sink and ice maker on bridge, windshield washers under bridge dashboard and the water heater. *Note that the ice maker is not operable although the freezer is working so we use ice cube trays.*
- Hot water runs from water heater to manifold then to head sink, head shower, and galley sink.
- Flush cold & hot system with potable antifreeze
- Make sure that forward bilge is empty by running the pump from the switch at lower right of main DC panel. The float switch was replaced in 2025 so it runs automatically



Salt water systems

- There are seven saltwater intake thru hulls with seacocks. Four of these have strainers.
- Lubricate all seacocks. The head pump out seacock & macerator pump were replaced 2025
- Head intake thru hull (#1) is located under the floor of the main berth just inside the door. The shower sump is also located here.



- Black water 47 gallon waste tank, and the macerator and pump out thru hull (#2) and is located under salon stairs. Tank should be pumped out before storage.



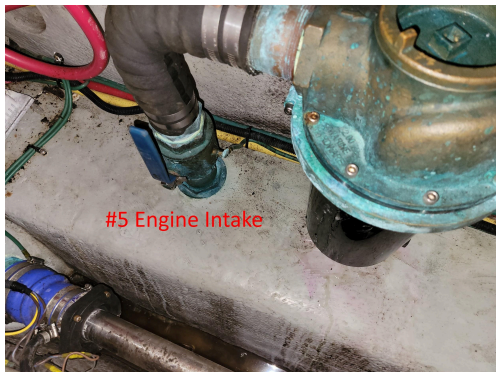
- AC pump for salon and forward AC units. Pump and thru hull (#3) with strainer located on the starboard side of the engine room.



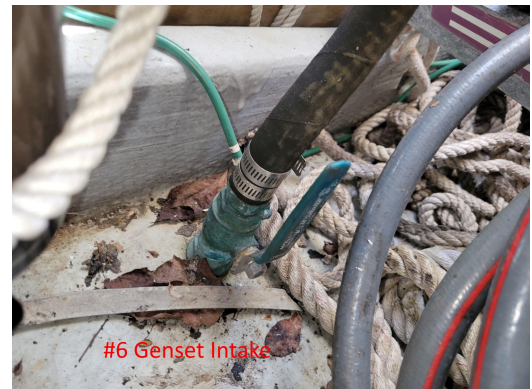
- Saltwater washdown hose is in the anchor locker. Pump and thru hull (#4) with strainer on fwd port side of the engine room.



- Engine intake, thru hull (#5) and a strainer located aft of the engine in the engine room.



- Genset intake, thru hull (#6) and strainer located in lazarette stbd of genset



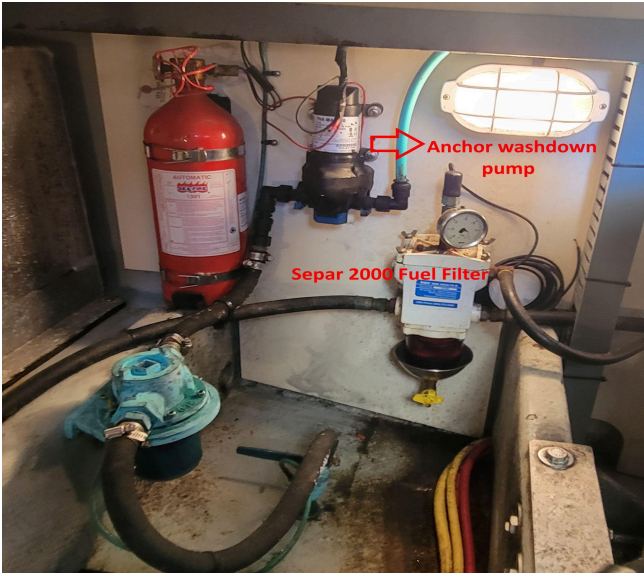

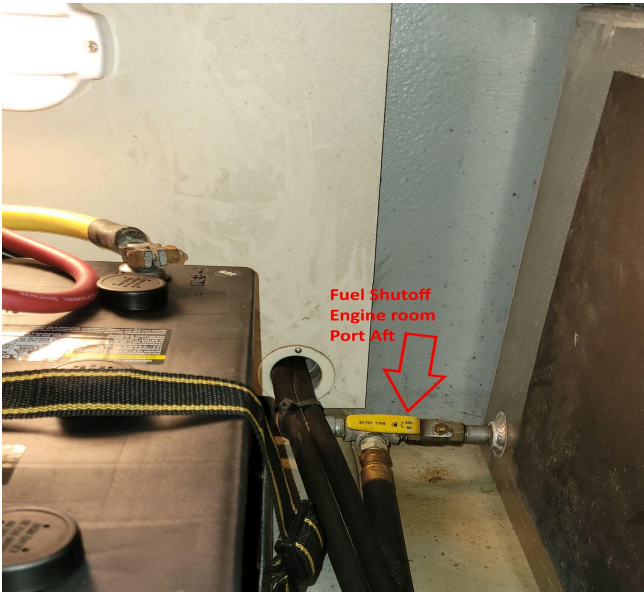
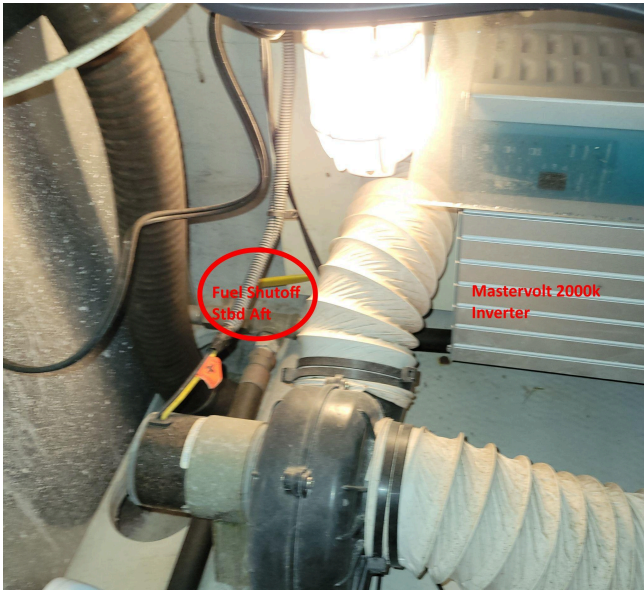
- Engine exhaust drain thru hull (#7) is stbd aft of muffler



Diesel fuel systems

- Two 150 gal tanks in the engine room filled from port and starboard cockpit.
- Engine fuel shutoffs in the engine room aft stbd & port. Close before changing fuel filters
- Genset fuel shutoff in the engine room at port fuel tank
- *Note: fuel stabilizer should always be added to fuel for the winter and the motor run for at least an hour*

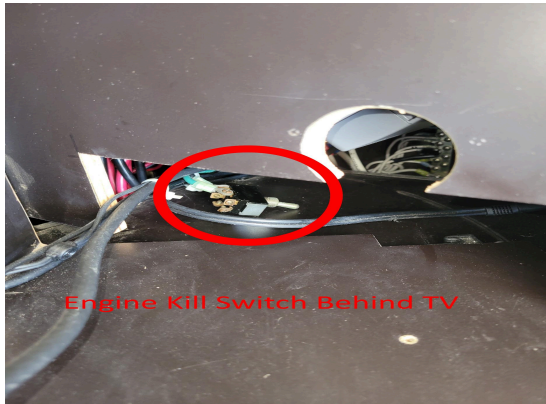
Fuel filters

Engine	Genset
Separ 2000 - filters with spare parts	Racor 120R-RAC-02
 <p>Anchor washdown pump</p> <p>Separ 2000 Fuel Filter</p>	 <p>3583</p> <p>Fuel / Water Separator</p>
 <p>Fuel Shutoff Engine room Port Aft</p>	 <p>Fuel Shutoff - Stbd Aft</p> <p>Mastervolt 2000k Inverter</p>

- Do Not Fog diesel engine or genset

Propulsion Systems

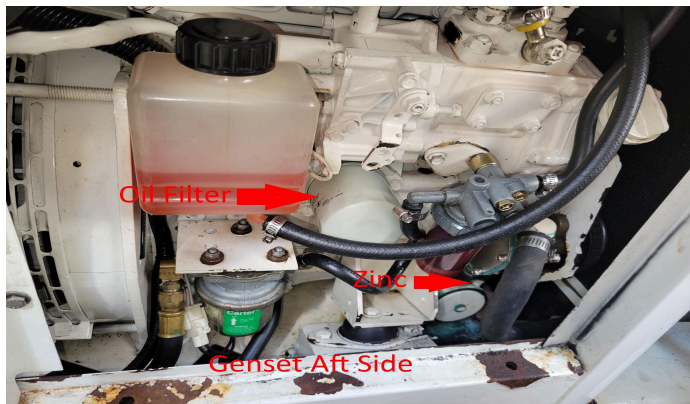
- Main engine anti-theft cutoff switch behind salon TV set



- Oil & filter change - Use the Oil XchangeR in Lazarette - *Shell Rotella ELC*. for the oil changes are in the galley. Might need a bit more

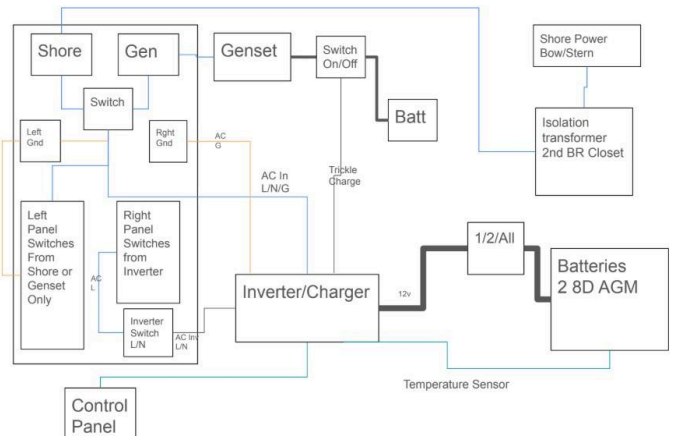
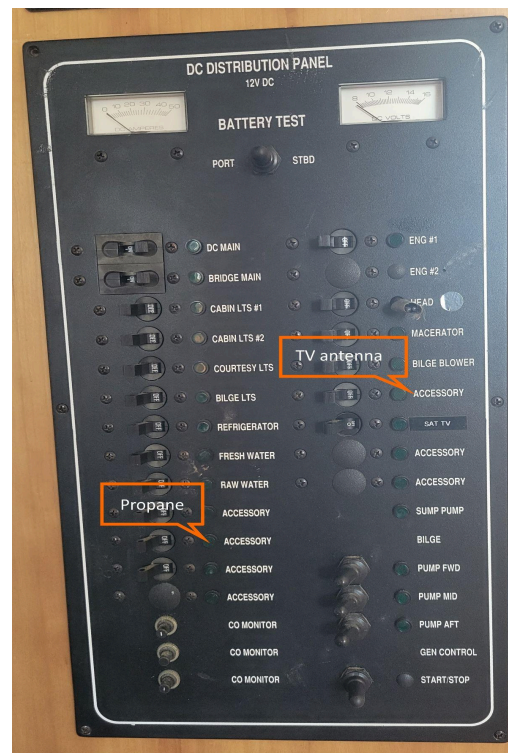


- Zincs - Four on the main engine. One on genset. Owner has supplied spares on galley counter



Electrical Systems

- Shore power 50 Amp connections in bow and stern. Shore power cord under lower helm
- Marine Shore Power Isolation transformer in guest berth inside hanging locker
- Genset in lazarette provides 120v AC power for port side of AC panel and for stbd side of AC panel
- Two 8D AGM 12 volt batteries (2025) for engine starting and house power in engine room port aft
- One Type 24 12 volt wet cell battery for genset in lazarette
- Mastervolt 2000 Inverter/Charger (new 2025) runs off the main batteries and powers port side of the AC panel (120v). Shore power (50 amp) runs through the Mastervolt from bow or stern connections. Genset & shore power is provided to both sides of the AC panel including AC units in salon and master berth and water heater. The integrated Mastervolt Charger runs from shore power or genset to charge main batteries with trickle charge for genset battery.



Communication Systems

- Marine VHF on bridge with power switch on bridge helm and remote microphone in main salon
- Marine VHF antenna on bridge port midship
- Yaesu 857D wide band VHF/HF Ham, SSB, and Marine bands. VHF Antenna bridge port aft. HF antenna bridge stbd aft
- HF Auto antenna tuner in lazarette
- KVH Satellite TV antenna on main mast. Receiver behind main salon TV
- Broadcast TV antenna on main mast

Navigation Systems

- Raymarine Pathfinder system at lower and upper helms. Lower helm is Master with CMap cards.
- GPS receiver antenna on bridge stbd midship
- Magnetic compasses at both helms
- Electronic fluxgate compass under lower helm
- Autopilot at both helms
- Knotmeter and depth sounder at upper helm and inlaid at lower helm chartplotter from thru hull sensors in engine room stbd aft. Knotmeter often stops due to marine growth and water temperature is inaccurate.
- Radar on main mast
- Horn & Fogmate automatic foghorn. Turn on Fogmate switch at bridge and quickly blow horn by the Count below to select the signal. Fogmate will respond with the same Count then start the horn.

FogMate™ Horn Controller				
Begin: Turn Nav. Light or Fog Horn Switch on				
Sound Horn by Indicated Count				
End: Nav. Lights/Fog Horn off				
Activity	Distress (SOS)	Restricted Maneuverability	Stopped	Underway
Count	5	3	2	1
● ● ● ■ ■ ■ ● ●		Motor ■ ● ●	■ ■	■
		Sail ■ ● ●	■ ● ●	■ ● ●
TSX Products Corp., (800) TSX-PROD				

Fire suppression system

- Automatic in both engine room and lazarette

Specifications & Parts

Engine

370 Yanmar 6LYA-STP					
Oil Filter		Yanmar	119593-35100	NAPA	FIL1825
Water Pump Impeller		Yanmar	119574-42550-01	Johnson Pump	09-821 B
Fuel Filter (Primary)		Separ 2000	01030		
Fuel Filter (Secondary)		Yanmar	41650-502330		
V-Belt		Mitsuboshi	RECMF-6530	Gates GREENSTRIP E FleetRunner	9540HD

Genset

Kohler 8EOZ						
Item	Kohler #	OEM		OEM #	Aftermarket	Aftermarket #
Alternator Belt	GM13660	Mitsuboshi		RECMF 1360	NAPA	Premium XL 25-7360
Oil Filter	229678				NAPA	FIL1064
Impeller	229826					
Fuel Filter (primary)	N/A	Racor		R12SUL		
Fuel Filter (secondary)	229715					
Circuit Breaker	250719					
Zinc Anode	260085					
Pump Drive Belt	363064					