

OPERATION MANUAL

M/V JUNEAU



Welcome aboard!

We are happy you have chosen JUNEAU for your vacation. We are sure you will enjoy cruising the islands of the Pacific Northwest on this vessel.

JUNEAU is well equipped with many conveniences to help make your adventure in the islands memorable. She has a generator, inverter, induction stove, and large format new chart plotters, and all the conveniences of home-out on the water! While this does add more complexity to operations, this Operations Manual should help ease the use and learning curve. This manual aims to highlight some of the unique features aboard JUNEAU to make your trip as pleasant and as safe as possible and act as a friendly reminder to good boating practices.

We trust this manual will help you become familiar with the boat. If you have questions about the boat or about places to visit, please do not hesitate to ask the AYC staff.

JUNEAU is a NO SMOKING Vessel. Thank you for your compliance.

The name JUNEAU comes from our home town, Juneau, Alaska. Alaska's Capital City surrounded by water and mountains. Growing up in Alaska gave us great appreciation for the outdoors, fresh air, and salt water. This boat grants access to all the Pacific Northwest has to offer, and it is a pleasure to see her name continue on in charter service, to share with others.

You may recognize the lines of this boat from its original heritage, the Classic Camano "Troll". The original hull was designed by Bob Warman in 1989. This boat uses a keel form hull, to provide some lift at cruising speeds yet retain quality ride and economy at lower cruise. You may have seen these classic boat lines before, as there are over 350 built and cruising on both East and West coast. There are at least 10 Camano boats on Anacortes Marina E dock alone! A great testament to a classic PNW boat design.

Helmsman Trawlers of Seattle, WA took up the manufacturing and sales, and upgraded all systems, woodwork, layouts, and packaging to make it a fully functional comfort trawler, with all the amenities and comforts. The Helmsman layout differs in several ways, with a dedicated full walk in shower/bench, and galley UP design for ease of use, character, and beauty. We love the balance of durable fiberglass outside, and beautiful woodwork inside!

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YACHT SPECIFICATION SHEET

MAKE Helmsman

MODEL 31 Trawler

YEAR BUILT 2017

USCG DOCUMENTATION # 1277255

HOMELAND SECURITY DECAL # 8565147

MMSI 338325892

HULL ID HTL31029A717

LENGTH OVERALL 31' 3"

DRAFT 3' 0"

BEAM 10' 6"

AIR DRAFT (Antenna UP) 17' 3"

WEIGHT 11,500 LBS

ANCHOR CHAIN 35 feet

ANCHOR RODE 390 feet

CRUISING SPEED 9 KNOTS

CRUISING RPMs 2400 RPMs

MAX RPMs 3100 RPMs

FRESH WATER CAPACITY 100 GALLONS

FUEL TANK 150 GALLONS

HOLDING TANK CAPACITY 30 GALLONS

ENGINES 240 HP Single Hyundai SeasAll

GENERATORS 3.5 kW Whisper Power

TENDER Achilles inflatable, 9' 6", 4 HP with Integral fuel tank

IMPORTANT POINTS:

2 heat sources – each has separation controls and thermostats
 Engine heat (12V, underway only)
 and
 AC Heat pump (120V Shore/Gen only)

Sliding Salon Door – It is HEAVY! LATCH it closed, or WIRE HOOK it open for safety when underway

Fire Extinguisher located above stovetop
Life jackets located in the bedroom closet and lazarette
Discharge Placards (oil & waste) located above overhead storage, drop down storage
Battery system are **fully automatic** – No typical intervention
 (combining, isolating, charging, etc)

ACCESSORIES LIST :

Emergency Locator USCG Light: Located in main salon pull out drawer under settee

Life Jackets: 4 adult, 2 child in master bedroom closet
 Additional 7 adult in rear lazarette storage

Throwable: Ring located on ladder to flybridge

Tool Box: Located in pull out drawer under forward cabin bed.

Spare Parts: Located in forward cabin under mattress

First Aid Kit: Located in main salon pull out drawer under settee

Flashlight: Basket forward of Helm, pull out drawer under settee, utensil drawer

Power Cord Converters: Located in master bedroom closet (3 types)

Fluids & Oils for Engines: Located STBD side of engine in crate

Second Anchor and Rode: Located in forward cabin under mattress

MANUALS: All manuals are in the forward cabin port side shelf

BOAT OPERATION

Introduction

All manuals are stored in Master bedroom, port side upper cabinet. These are originals, with no duplicates, so please leave them as they are found. However, you will likely only need this operations manual for normal operations.

Paper navigation charts covering the San Juan Islands, Puget Sound and British Columbia are stored forward of the helm, rolled up. After using a chart please replace it. A list of these charts is at the end of this manual. Please review this list prior to departure to ensure that your intended cruising area is covered.

Engine Inspection

Remember your “**WOBBS**” every morning: **W**ater (Coolant), **O**il, **B**ilges (Inspect and Pump-out), **B**elts and **S**ea Strainer.

Check the level of COOLANT in the expansion tanks located at the front of the main engine (front floor hatch). Check the level of OIL in engine by checking your dipsticks located mid-Engine, Port side (Main floor hatch). Look at the etch marks on each dipstick that indicate the proper oil level. **DO NOT OVERFILL OIL!** Only fill if oil levels are below the ½ way mark. Ask your fleet captain at checkout if you have any questions about the markings on dipsticks. **You need to pull the dipsticks, wipe, then reinsert and pull again to get a proper reading.** Please use a paper towel or oil rag, not the dish towels! Check the general condition of the BELTS, HOSES, and FUEL LINES.

Note - There is an absorbent pad starboard side bilge that catches a small leak on the transmission oil cooler, no action typically needed during your charter.

Check transmission fluid levels (aft side of engine, STBD on transmission case). Take care in reinserting dipsticks.

Check fuel filter (visual, through clear glass) for water and other contaminants and drain as needed into a bucket for disposal. The RACOR FILTER, on the REAR BULKHEAD has a small fuel bowl directly below drain, to collect a small amount, and absorb it in a rag after drain complete. Located in main engine compartment, rear bulkhead CENTER.

Ensure the valve on each RAW WATER THRU-HULL is in the ‘**open**’ position (lever in-line with valve). Observe the glass of each RAW WATER STRAINER for debris. Shining a flashlight thru the strainer often helps see debris.

MAIN ENGINE RAW WATER STRAINNG – with Engine **OFF**, strainer can be opened, cleaned, and re-installed without turning thru-hull off. For other strainers, close the seacock, open the strainer cover, clean the strainer, and reassemble. Remember to reopen the seacock.

****Strainer tool is located in the tool drawer, pull out drawer under the master bed.**

****HAND TIGHTEN only****

Engine oil, transmission fluid/oil, and coolant are stored STBD side of main engine.

Start-Up

This is a single engine, single screw vessel.

Before starting the engine, do your inspections.

THE ENGINE CAN ONLY BE STARTED/STOPPED FROM THE LOWER HELM STATION

Ensure lower helm gearshift is in 'neutral', or the engines cannot be started because of the "neutral lockout". This is a throttle position 90 degrees to the flat mount of the throttle, NOT absolute vertical (as the throttle base is tilted).

Turn the key clockwise partially until the pre-heat coil comes on in the engine display screen (rectangular silver display). After coil turns off, turn the key fully clockwise to engage the engine. If the starter does not engage when the key is turned, move the gearshift lever slightly until you find neutral and try again.

Confirm water flow from exhaust (STBD side, under swim step, will see visible water flowing from under swimstep aft).

If the engine cranks slowly or fails to turn over, check the condition of the battery on the ELECTRICAL PANEL. If the battery is low, start the generator, and charge the main bank through the Inverter/Charger. With main circuit breaker on for GENERATOR MAIN, and on for INVERTER/CHARGER, this will charge automatically, with generator running, at 80 amps bulk charge rate.

A prolonged engine warm-up is not necessary. Even when the engine is cold, a period of 3-4 minutes at 600 – 800 RPM before engaging the transmission is adequate. Observe the readings of the gauges.

ALWAYS OPERATE THE BOAT WITH THE TEMPERATURE GAUGE SELECTED, FOR AWARENESS

Main Engine control panel (rectangular silver display), press up/down until TEMP is displayed.

Target will be 90-95 deg C when underway, if above that, reduce throttle, and/or clear strainers.



Note -- If oil pressure is low, shut down engine, and inspect engine compartment and look for possible cause (for example, loss of oil.)

Caution -- If an engine is overheating or there is lack of raw water expelled in the engine exhaust, stop the engine immediately. Recheck the raw water-cooling system to ensure the seacock is 'open' (handle in-line with valve). Next, check the raw water strainer for debris. Remove the strainer, clean, re-assemble, and reopen the raw water intake valve (seacock).

*Restart the engine and re-check water flow from the exhaust. If water is not flowing properly, Make sure raw water system has picked up a prime, If not, shut down close the thru hull and open top of sea strainer and fill to brim with water in order to get a prime. Re-assemble sea strainer, open thru hull, restart engine and check for raw water flow.
If none of that works, Seek help.*

Gearshift Selector

Shifting into gear will not be allowed until pressing the “**Warm**” button on the gearshift. Press once to turn off light, and shifting will be allowed until ignition is turned off.

Fuel Management

The valves are set in the engine room to draw from both tanks at all times, assume that they draw evenly.

Fuel gauges are powered by a switch overhead, with both tanks having independent gauges overhead. Only power on fuel while reading gauges, or as needed. Do not leave them on full time.

Do not run out of fuel with a diesel engine.

If either tank draws to empty, the entire fuel system will need to be primed, from tank to engine injectors.

Shut-Down

Before shutting down, allow the engine to ‘idle’ for about 5 minutes to cool gradually and uniformly. The time engaged in preparing to dock the boat is usually sufficient. Ensure GEARSHIFT is in the ‘neutral’ position. Turn off engines by lower helm key.

AFTER Shutdown, with ignition OFF, flybridge throttle can be advanced to full forward, when putting on blue canvas cover. (default start control will always be lower helm on startup)

Flybridge Helm Cover

Please COVER Flybridge Helm with Blue Canvas **ANYTIME** when not in use, as it was when you started. This keeps moisture and sunlight off the flybridge dashboard and instrumentation. Even during your trip when at anchor, or in the marina keep the blue canvas on the upper helm, to protect from hot sunshine.

Getting Underway

Close Forward Deck Hatch, Windows, and Portholes.

There are 4 forward Portholes that need to be closed *Tightly* with 2 knobs each.

1 port / 1 starboard in forward cabin

1 in shower

1 in head

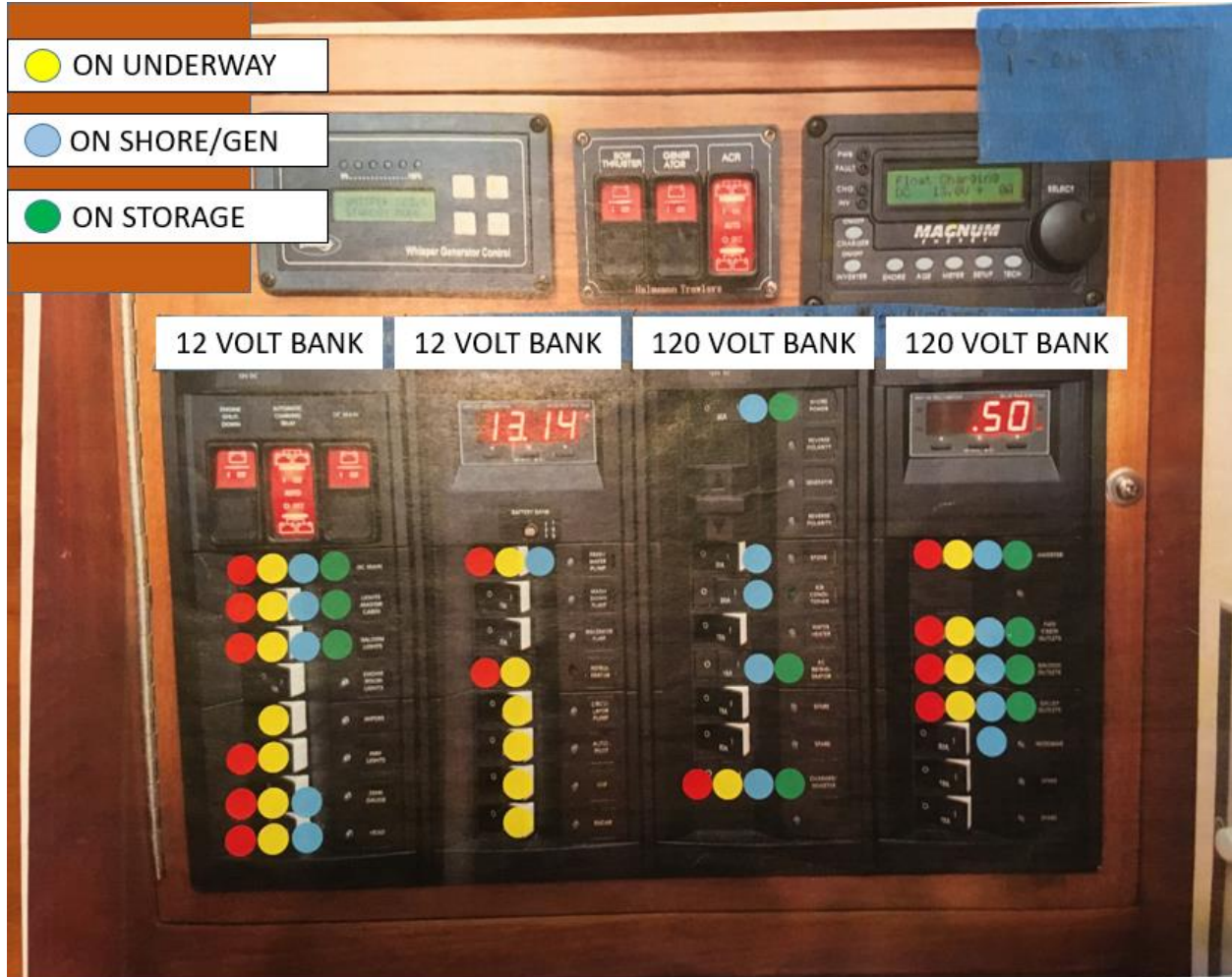
Ensure tables and counters are free from any objects that may fall off (and break).

Do engine checks (WOBBBS), if not already done.

Start the engine

Ensure the following are **ON** for safe navigation, located on the DC Panel (YELLOW DOTS):

UNDERWAY CONFIGURATION ON-YELLOW



Turn on Chart Plotter (power button center right)

Open AutoPilot display on left side of MFD, by selecting the left vertical bar on the touch screen

This is helpful to display the RUDDER ANGLE, when operating boat.

VHF Radio to 16

Turn the AC main Breaker OFF at helm breaker panel (Top switch, third column)

Disconnect from Shore Power

It is easiest to leave the shore power cord plugged in to cockpit receptacle, with tie at aft handrail, and routed up to front deck at all times. Coil on front deck near hatch.

Select the helm you wish to operate from:

Main Helm:

Acknowledge “Warm” on throttle display.

Main helm will always be the default controller, unless “TAKE” is activated at flybridge station.

Flybridge Helm:

Ensure BOTH gear shifters are in NEUTRAL

Double press the “TAKE” button at the station you wish to control from
(both stations must be in NEUTRAL, for the “TAKE” to transfer)

BOW THRUSTER

Activate the Bow Thruster by **double-pressing** the Power button and hear beeps and look for the solid green light.

(If you only press it once, it’ll beep and then turn off as a safety feature).

Thruster will stay on for approx. 10 minutes, and can be kept active by activating thruster, if needed.

Only use bow thruster for **short bursts of 2-3 seconds**, and allow momentum to continue rotation.

Thruster will auto turn off after 10 minutes of inactivity, so ensure you turn it back on for docking.

Before removing the lines, it is a good idea to confirm the engines and thruster are working in all directions by giving them a quick test in and out of gear.

Advancing the throttle levers too quickly will result in engaging transmissions at higher rpms, which can damage transmissions. Start off all movement with first stop engagement on throttle/gear shift, then ramp up as needed.

If reverse is attempted while prop is spinning forward (even if you are in neutral, with excessive forward momentum), engine will shut down for safety. Keep all maneuvers SLOW.

Once outside the marina stow the lines and fenders.

Forward and Midship Fenders can be flipped up to walking rail, inboard of the forward handrail and inboard of the midship cleat to stow while underway, and easily deployed for docking. Aft fenders flipped up into cockpit. Safest to leave all fenders tied up for quick usage.

Windshield Wipers

Controls for the windshield wipers are located overhead in the lower helm. Turning rocker switch on activates intermittent. If you push rocker switch farther (momentary spring loaded), it will cycle through different modes, eventually repeating. Stop on which function you desire. (Typically, it is all 3 wipers, on intermittent)

Cruising

Engage the GEARSHIFT. Start off all movement with first stop engagement on throttles, allow transmission to establish gear, then ramp up as needed.

Cruising speed and Fuel Consumption will vary widely, depending on RPM/Speed. SEE CHART BELOW for JUNEAU specifically.

Your speed will vary depending upon the weight and load and weather conditions.

Best cruise is at:

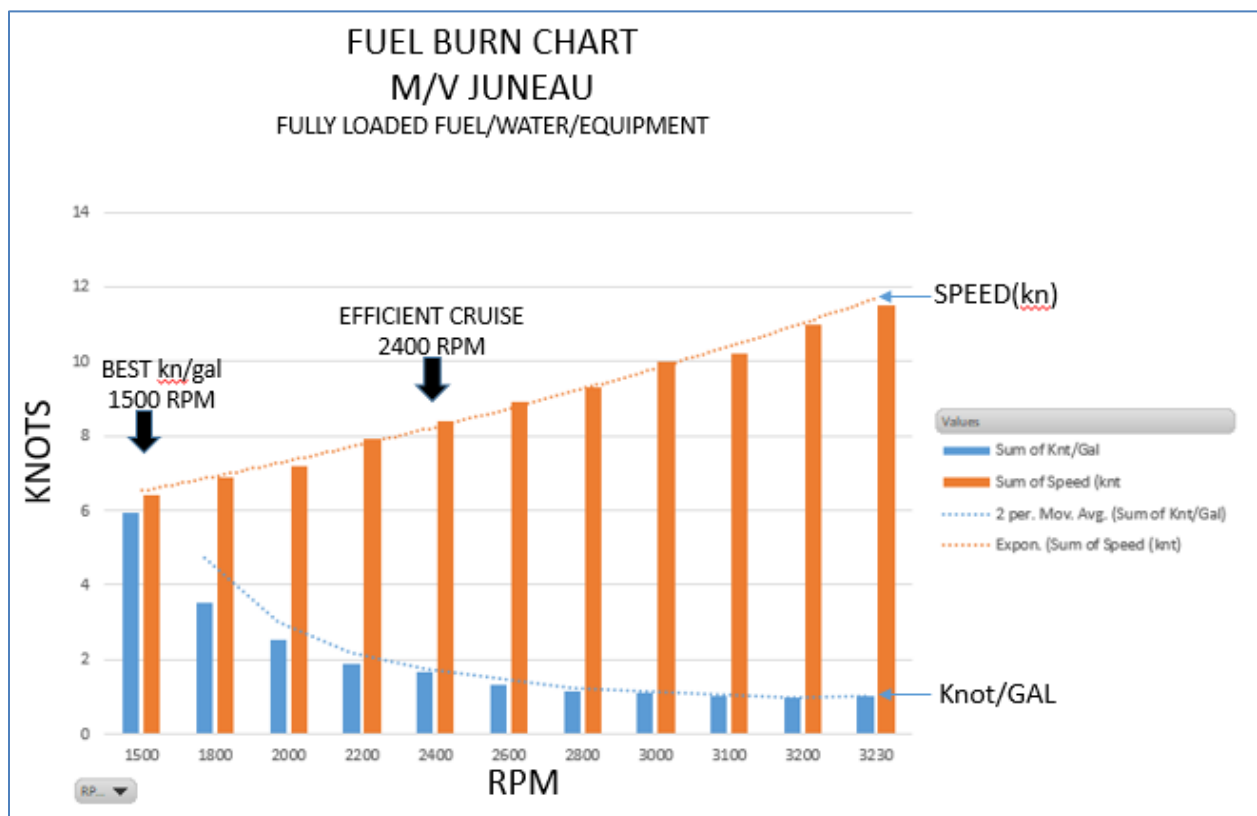
2200-2400 RPM, gaining 8-8.5 knots.

This gives a reasonable fuel burn of 4-5 GPH (2Knt/GAL).

Most economical cruise will be at 1500 RMP, gaining 6.5 knots, burning 1GPH (6Knts/GAL)

Please keep Maximum RPM for cruise **UNDER 3000 RPM**.

Note -- Avoid higher engine speeds as it causes higher engine temperature, possible damage, and higher fuel consumption. In general, lower RPMs result in much improved fuel economy.



Trim Tabs

Bennett trim tabs can be adjusted for comfort and visibility. As a slow moving vessel, there is minor trim tab reaction, but not extreme. Turn on master trim tab switch on helm dash, then control bow up/down of each tab.

Note – currently on JUNEAU, the port indicator indicates erroneous data. Both activation buttons work, and tabs work normally, however, indication is not accurate.

When turning OFF Trim Tab switch on main helm, both trim tabs automatically cycle back to UP/STOWED.

Check Engine Room every two hours

Check the engine room every two hours or so to ensure that everything is working and nothing is amiss, Such as fluid leaks, excessive water, odor/smell.

Docking

During docking, you may use the FLYBRIDGE HELM for greater visibility to the sides and stern. Have your crew make ready the lines and fenders and give clear instructions on how you will be docking. Often times your crew will need to step off from the swim step or cockpit rail with the stern line. Another crew member will need to be at the bow or mid-ships to hand over the next lines. This boat has a bow thruster, and may be engaged in short bursts to hold the vessel while lines are put on the dock.

Prior to docking, **TURN OFF TRIM TAB** switch. Trim tabs will automatically stow to full up.

Activate Bow Thruster, by **double-pressing** the power button and hearing confirmation beep. Test with brief activation to ensure system is working.

Docking Lines

- 2 30ft main black lines 5/8” for bow and stern
- 1 50ft white line 3/4” for spring line
- 2 50ft white lines 3/8” for general usage

Helm Configurations (standing/sitting):



Fueling Up

OPEN FUEL FILLER CAP(S) located on EACH SIDE of JUNEAU. Each tank holds 75 Gallons, and each deck fill feeds only 1 tank (**NO CROSSOVER PLUMBING FOR FUEL**). You will need to fill from both sides of vessel. Deck Fitting key is located in the top drawer of the salon.

DIESEL FILL PORTS ARE THE **FARTHEST AFT PORTS ON BOTH SIDES OF JUNEAU, AND LABELED**. Not to be confused with the Water or Waste ports!

MAKE SURE YOU HAVE THE RIGHT FUEL! DIESEL! DIESEL! DIESEL!
MAKE SURE IT IS GOING INTO THE RIGHT DECK FILL!

DOUBLE-CHECK!

Before pumping, have an oil/fuel sorbs handy to soak up spilled fuel. Power on the Fuel Gauge switch, located to the left of fuel gauges overhead. Locate **fuel vents inboard, inside cockpit wall**, and listen for tank becoming full and to know where sorbs may be needed. **IT IS HELPFUL TO HOLD A SORB LOOSLY OVER VENT WHILE FILLING, TO CATCH ANY SPRAY/SPLATTER UNDER NORMAL FILLING.** You should have a rough idea of the number of gallons you will need via the fuel gauges prior to filling.

Place the DIESEL nozzle into the tank opening, pump slowly and evenly, and note the sound of the fuel flow. As the tank fills, the sound will rise in pitch or gurgle. Pay attention to the TANK OVERFLOW VENT inside the cockpit. The sound may indicate that the tank is nearly full.

Fill to full on the FUEL GUAGE, DO NOT fill up until overflowing vent.

Spillage may result in a nasty fine from law enforcement.

****Fuel cap is the MOST AFT cap for filling**

****Fuel key is kept in the drawer of the salon**

Replace each tank cap. **USE KEY TO RE-INSTALL CAP**, to properly seal the o-ring on fuel cap on deck.

Caution -- Clean up splatter and spillage immediately for environmental and health reasons. Wash hands with soap and water thoroughly.

BOAT ELECTRICAL

The electrical system is divided into two distribution systems: 110-volt AC and 12-volt DC.

Circuit Breaker Panel is located at the HELM, at the foot of the Captain's Chair:

2 LEFT COLUMNS are 12V

2 RIGHT COLUMNS are 110V

There is a light down low mounted on the chair, with a small sliding switch on top to turn it on. You can also use flashlight, located on settee shelf.

The systems are controlled from the AC AND DC ELECTRICAL PANEL located at the Captains feet. BATTERY SWITCHES are controlled by remote switches, and combiners (ACR, Automatic Charging Relay), and are also located at the captain's feet. These are ALL located at this central location.

When not connected to shore power, batteries are providing all power. Therefore, monitor the use of battery levels carefully with your volt meter located at the top of the circuit breaker (left side LED display is 12V system, right side LED is 110V system).

Under LCD display, you can push button to select either Volts or Amps to display, and a toggle switch right below that to select WHICH battery pack you are viewing.

Bank #1 – House Bank

Bank #2 – House Bank

Bank #3 – Generator Start

How much electricity is being drawn from the batteries can be monitored on the ampere meter located at the top of the circuit breaker (left side LED display is 12V system, right side LED is 110V system). Turn off electrical devices that are not needed.

Most breakers are labeled by colored dots on the panel.

YELLOW signifies "Usually-ON for CRUISE / UNDERWAY"

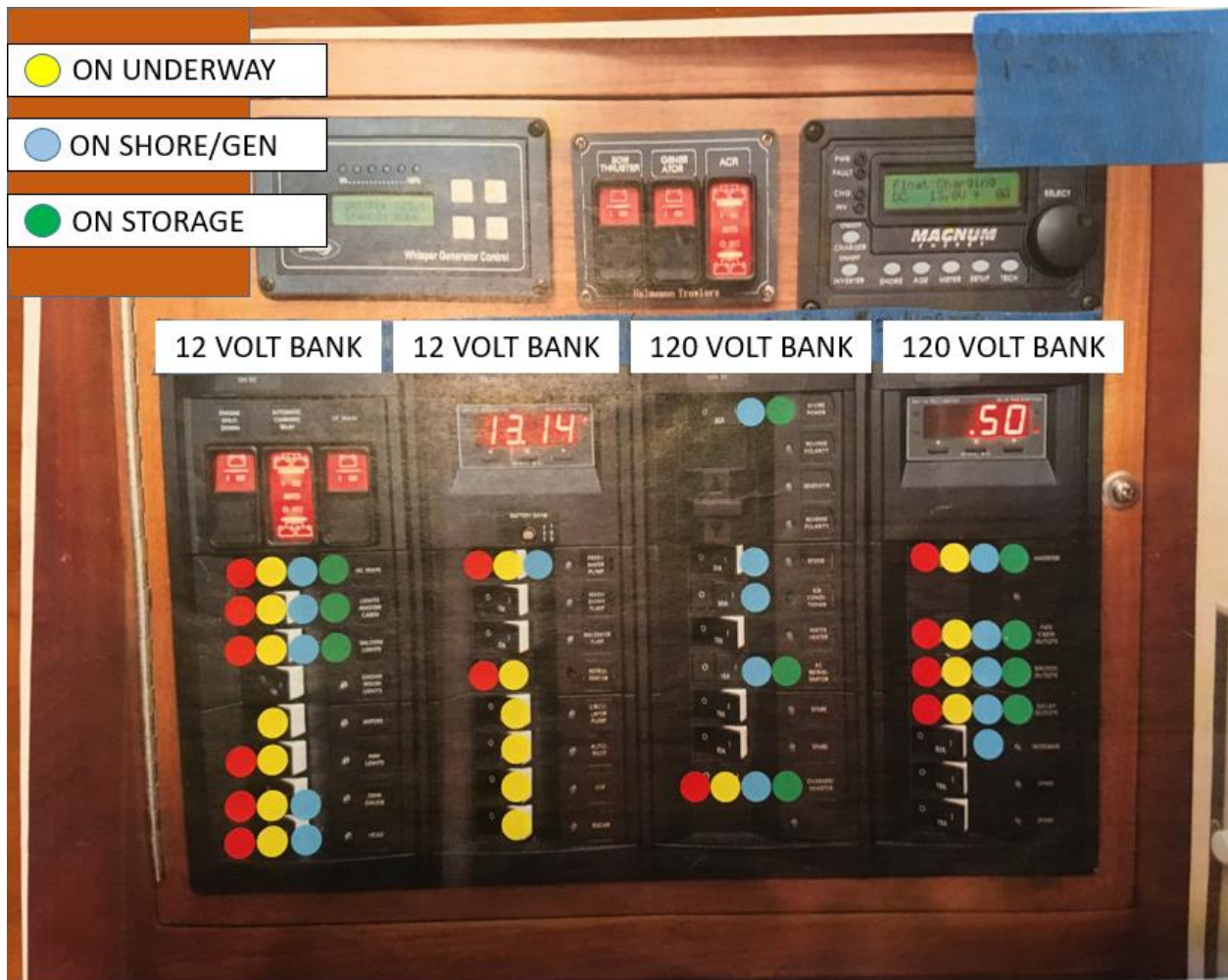
BLUE signifies "Usually-ON for SHORE POWER / GENERATOR".

GREEN signifies "STORAGE (end of trip)"

NOTE – There are 3 DIRECT OPERATION SWITCHES on the circuit breaker panel.

These shall remain OFF unless you intend to actively use the system:

- Engine Room Light (breaker switch turns on engine and lazarette lights directly)
- Forward Wash Down (Only turn on when actively washing down bow, if ever needed)
- Macerator Pump (only turn on break when discharging, thru-hull and 3-way valves open)



110-Volt AC System

SHORE POWER or GENERATOR supports all AC equipment and receptacles on board, as well as the battery chargers.

To connect to shore power, plug the **30 amp POWER CORD** into the boat and then into the dock receptacle. Check the power rating/plug size of the nearest dock receptacle (that is 50 amp, 30 amp, 20 amp, or 15 amp). If necessary, add a **CORD ADAPTER** located in master bedroom closet. Turn the dock power on, THEN turn on breaker (top switch of 3rd column on panel). Cords coming off the bow can be wrapped loosely around the bow line or bow rail to keep it out of the water.

Onboard Adapters:

- 30A vessel to 50A shore pedestal (typical usage at a dock with only 50A pedestals)
- 30A vessel to 20A shore (to be used moderately, in remote/unique locations)
- 30A vessel to 15A shore (to be used moderately, in remote/unique locations)

At the ELECTRICAL PANEL, flip the SHORE CIRCUIT BREAKER on. Check for reverse polarity. Then turn on appropriate breakers for any systems you are using.

Watch you amp meter for load, keep below 25A.

If the load exceeds amperage, you will pop your breaker. If this occurs, turn off some items (e.g. water heater) and wait to turn on one of your systems until your use of electricity drops. You may need to reset at the dock or on the electrical panel.

Generally, usage is as follows:

- Water Heater – 15A
- Stove (1 burner on high) – 14A
- Battery Charger (Bulk Charge) – 14A
- Inverter – 4A
- Plug In Space Heater – 13A
- Single 120V Heat Pump (1 heat zone) – 8A

As you can see, 30Amps doesn't go very far these days!

Only run 1 load at a time, for major loads (Water Heater, Stove, Bulk Charge, Space Heater).

If your outlets fail to work, check your GFIs to make sure that they have not been tripped. Be aware that one GFI breaker may supply plug-ins in several areas.

JUNEAU has GFI breaker outlets in the Main Engine Bay, 1 forward, 1 aft. [There are two in the galley, 1 forward and 1 aft.](#)

House (12-volt) System

6 battery banks support 12-volt DC power:

5 batteries bussed together, to provide HOUSE, MAIN START, BOW THRUSTER, INVERTER

1 battery GENERATOR START ONLY

ALL NORMAL OPERATIONS OF BATTERIES/CHARGING SHOULD BE AUTOMATED IN NORMAL OPERATION

The REMOTE BATTERY SWITCHES are located below the captain's chair. Normally, leave the ENGINE/ GENERATOR and HOUSE SWITCHES in the 'ON' position.

Note -- Do not change the position of the switches while the engines are running or the alternator diodes will be damaged. Change positions with the engines off.

The simplest thing is to just leave all of this alone unless there is a real problem and then it might be best to photograph and then contact AYC for discussion.

Your 12 volt panel shows all the systems supported by your batteries.

Bilge pumps should always be left on. There are 4 Bilge pump switches, located on the left side of the Helm Steering wheel, directly ahead of the wheel. These should **ALWAYS be ON** (3 red indicators, 4th is shower sump, remaining on as well)

House Battery Bank & Switch

The HOUSE BATTERY BANK provides power for all DC systems. When disconnected from shore power, all 12-volt devices drain the house battery. Use devices as needed. The DC voltmeter on the DC panel can be toggled to view different measurements of health.

When a battery bank is being charged, the voltage will read from about 13.1 volts to 14.4 volts depending upon state-of-charge of the battery bank. When the battery bank is at rest, (that is, not being charged), the voltmeter can give a rough indication of the state-of-charge of the battery bank.

ALL batteries are charged by the engine ALTERNATOR while underway. **ALL batteries** are charged by the BATTERY CHARGER when connected to shore power.

Ensure the Battery Inverter/Charger circuit breakers at the electrical panel are ON. The GENERATOR will also charge the batteries, similar to shore power, if the breakers are similarly on.

AGM Voltage State:

Voltage (Wet Cell Battery)	Battery State
12.8 volts	100%
12.6 volts	75%
12.3 volts	50%
12.0 volts	25%
11.8 volts	0%

Power Management

When not connected to shore power or running the generator, it is *imperative* that you monitor your battery voltage. If the batteries are allowed to drop too low, the battery charger will not be able to charge the batteries and very few, if any, systems will work, so please keep an eye on your battery levels.

The batteries should be charged if the battery capacity drops below 50%. Continuing to draw power beyond the 12.3V limit will result in damages batteries.

To conserve power when at anchor, it is recommended that you turn off unneeded systems. The INVERTER should be turned OFF, when not actively using outlets, as it does draw power in standby.

If you aren't actively using any systems, it's *highly* recommended to turn it off at the circuit breaker when at anchor, to preserve power.

Battery Parallel Switch

The 2 battery banks have an automatic combiner, when charging voltage is sensed, all batteries combine together to charge. When no charging voltage is sensed, the 2 battery banks automatically separate.

There should be no need to force battery coupling if house bank is run down due to overuse. Generator can be started, and inverter/charger will charge house bank (just like if it was plugged into shore power).

Bow Thruster Breaker

The breaker and in-line fuse for the bow/stern thruster is located in the forward cabin below the mattress.

It is wise to always test your thruster before untying from the dock or while approaching a moorage. If they fail to turn on at the helm station, check the breaker(s). Be aware that thruster controls turn off automatically after 7-10 minutes and need to be re-armed on the helm control, at either helm. (beep will sound, indicating thruster has shut off)

Inverter Power

The INVERTER provides AC power to the 110-volt receptacle plugs (i.e. the microwave oven) when the boat is disconnected from shore power. The inverter does not provide power to the water heater or the battery charger. Your inverter has an independent control panel, at the foot of the captain's chair, TOP RIGHT sub-panel. The main Circuit Breaker is on the circuit panel, labelled "INVERTER". The actual inverter is located on the forward bulkhead, directly in front of engine.

Most operations of the inverter are automated. Ensure Inverter/Charger break is on, and display panel is powered up.

There are 2 buttons to control INVERTER and CHARGER separately if needed.

Display will indicate usage/charging state

It is important NOT to overload the inverter by attempting to draw too much current through the unit. Just as the shore power is limited to 30 amps, the inverter is similarly limited by its ability to invert and supply power. If you run too many energy intensive systems off the inverter at once (i.e. hair dryers, toasters, microwave, portable heaters, etc.), you will overload the inverter and it will stop inverting. **USE ONE THING AT A TIME.**

The inverter's power source is the DC house batteries located directly behind the main. The quantity of DC power is limited to the capacity of these batteries.

Do NOT run any high power loads off Inverter (ie hair dryers, toaster, coffee pots, space heater, etc.) It will quickly discharge the battery bank, and inverter is **rated at 2000 Watts**. Use these items **VERY SPARINGLY!** Monitor your battery usage very carefully! If anticipated power usage is heavy, start your generator or engines to keep batteries charged.

Microwave should be used at **LOW POWER** on Inverter, P3 or **LOWER!**

When connected to shore power, the inverter automatically becomes a battery charger for the 12-volt HOUSE BATTERIES. Should you detect the inverter failing to charge the house batteries, check the circuit breaker in the AC Panel and the inverter control panel.

Generator

Enter lazarette from cockpit floor hatch.

Open generator front cover by unlooping the rubber bands for the large panel facing aft/up only, to gain access to the generator. (YES, this is quite a bad design, when needing to check oil levels regularly!!) **COVER ROTATES AFT, THEN UP**

Check oil — dipstick is down low on generator. Ensure it is halfway up the dipstick.
Check sea strainer for obvious obstructions and shutoff valve OPEN.
Close sound shield and close lazarette hatch.

To start your GENERATOR, first check that your generator's fluids are topped off and the raw water intake is open. The generator controls are located at the captain's feet, the TOP LEFT sub-panel. Press the START button, it will sequence glow plugs, countdown, and automatic start. If it does not start you can try the cycle one more time by simply pressing the START button. The Exhaust is a dry stack, exiting above the water on the Starboard side, so you will not see water exiting.

Prior to starting, make sure main AC Breaker is turned off (The very top breaker on the 3rd column). After generator is running, turn your AC distribution switch to generator (slide up the cover on the breaker, it will only allow Shore OR Generator to activate). Then turn on AC systems as you would on shore power one system at a time.

NOTE OF CAUTION: The main generator breaker must always be off before the generator is started or stopped. A mechanical lock on the electrical panel will allow only generator power **OR** shore power

To turn the generator off, first take off the load by turning off individual AC breakers. Then turn off main AC distribution switch. **Let engine run with no load for 2 minutes, to cool down.** Lastly kill the generator by pressing the STOP button on generator control panel.

SANITATION SYSTEM

Marine Toilet

JUNEAU is outfitted with a simple to use electric head.

It is important that every member of the crew be informed on the proper use of the MARINE TOILET. The valves, openings, and pumps are small and may clog easily. If the toilet clogs, it is YOUR RESONSIBILITY!

Always pump the head for children, so you can make sure nothing foreign is being flushed.

Caution – Never put paper towels, tampons, Kleenex, sanitary napkins, flushable wipes, household toilet paper, or food into the marine toilet. Use only the special dissolving marine toilet tissue provided by AYC.

The operating panel for the head is located to the left of the head, on the wall below the sink. To use the toilet, you may add more water as needed by pressing the “FILL” button. After use, press the “FLUSH” button. Clean the toilet as necessary.

The HOLDING TANK level indicator is located directly behind the toilet to the right. You can power up the switch, and see the level. **Always turn the switch off** when not actively looking at gauge.

This head is FRESH WATER sourced, so there is no thru-hull for this system fill water.

Holding Tank

The sanitation HOLDING TANK holds approximately 30 GALLONS. Be aware of the rate of waste production (about 1 gallon per flush). With an overfilled tank, it is possible to break a hose, clog a vent, or burst the tank. The result will be indescribable catastrophe and an EXPENSIVE FIX to you. MONITOR THE TANK FILL LEVEL, and empty the tank EVERY OTHER DAY to avoid this problem. Flushing a few ounces of AYC provided deodorizer will help eliminate odors.

The HOLDING TANK is located on the centerline of vessel, fiberglassed into the hull directly forward of the engine. While there is a TANK FILL LEVEL gauge, do not rely upon this only as they often get clogged. Paying attention to the general number of flushes is best.

The holding tank is emptied in one of two ways:

#1 At the Marine Pump-Out Station, remove the WASTE CAP located STARBOARD side, FORWARD CAP. Insert the pump-out nozzle into the waste opening. Hold nozzle firmly against the deck fitting to ensure a tight seal. Turn on pump and open valve located on handle. When pumping is finished, close lever on handle and turn off pump. Remove from deck fitting.

If there is a fresh water hose on the dock, rinse the tank by adding 1-2 minute of water into tank. Then re-pump to leave the tank rinsed for the next charter. This also eliminates head odors.

#2 The tank's contents can be discharged with the ELECTRIC MACERATOR only in Canadian waters.

To operate the macerator:

- OPEN THE 3-WAY Y-VALVE in the Engine Room, directly upstream from the BLACK MACERATOR PUMP.
- OPEN the THRU HULL VALVE downstream of the Macerator pump.
- Press the switch on the ELECTRICAL PANEL "MACERATOR" to activate pump. Listen to the macerator's sound. When the pitch becomes higher, the tank is empty. Discharge may be observed on the STARBOARD side. It should only take a few minutes to empty the tank. The ONLY control for the Macerator is the circuit breaker switch.

Y-Valve

The Y-VALVE directs waste effluent DISCHARGE to the On-Deck Pumpout, **OR** Macerator Pump Thru-Hull. The Y-VALVE is located starboard side of main engine compartment. A plastic strap keeps the handle pointed to the ON-DECK Pump Out – the normal position.

Y-valves are usually wire-tied to the holding tank position in respect to Coast Guard regulations. Please leave it "as is" unless there is an emergency. Be familiar with the applicable laws concerning dumping sewage directly overboard.

WATER SYSTEM

Fresh Water Tanks

The FRESH WATER TANKS holds 100 gallons between 2 50 gallon tanks. Observe the water level by activating the WATER LEVEL GAUGE SWITCH overhead, directly to the left of the water level gauges. There is a port and starboard gauge.

The 2 tanks are PLUMBED TOGETHER, with NO ISOLATION. They will find a level (or close to it depending how the boat is loaded and tilting).

To refill the tank, remove the WATER CAPS located on both sides of vessel. **Avoid flushing debris from the deck into the tank opening.** DO NOT fill water and diesel at the same time!

While both tanks are combined via tubing, the fill rate may be faster than tanks can equalize. You can either fill one side, wait several minutes, and fill again from the same side. OR – Fill both sides directly from the water caps on PORT and STBD deck. You can monitor water levels on overhead gauges, to see how tanks are filling.

****WATER fill cap is the FWD Port, and MID Starboard cap for filling**

****Water deck key is kept in the drawer of the salon**

Replace each tank cap. **USE KEY TO RE-INSTALL CAP,** to properly seal the o-ring on deck cap.

Fresh Water Pressure Pump

The WATER PRESSURE PUMP is located on the main engine bay floor, forward and starboard of main engine. Activate pump at the DC panel by turning on the breaker “FRESH WATER”. If the water pump continues to run, you are either out of water or might have an air lock and need to bleed the system by opening up a faucet. If you run out of water SHUT OFF YOUR HOT WATER HEATER on the AC panel. Serious damage can occur!

Hot Water Tank

The HOT WATER HEATER has a **6 GALLON CAPACITY** tank and is available when connected to shore power or via engine heat exchanger underway. To use on shore power, flip on the water heater circuit breaker on the AC electrical panel. The water heater is located in the main engine bay, forward and port of main engine.

When underway, with the hydronic loop circulating engine heat, the water will be heated automatically. Water heater, Cabin Heater, Flybridge Heater are all in the same loop going back to main engine. This heating loop is controlled by circuit breaker “CIRCULATOR PUMP”, and switch in the overhead far left, labeled “Hydronic Heat”

EXTREMELY IMPORTANT: Do not use the electric water heater if the water tanks are very low or if they run dry. The electric element may burn up if the tank has no water.

Waste water from the sinks drains directly overboard to port. Shower drains overboard port, via the SUMP-PUMP, located under the stairs into the forward cabin.

Shower

Before taking a SHOWER, make sure water pressure and shower sump breakers are on. Take only very short “boat” showers (turning off water between soaping up and rinsing). Keep shower tidy wipe down the shower stall and floor. Check for accumulation of hair in the shower and sink drains.

An additional FRESH WATER SHOWER is located outside in the cockpit starboard, with both hot and cold. Ensure that the faucets and nozzle are completely off after use.

A pressured RAW WATER WASHDOWN is available at the BOW, on a spray hose. To activate, flip the circuit breaker 12V labeled “RAW WATER WASH”. After use, turn the switch off to prevent pump burn out/cycling as this water is not used frequently.

At times, the Fresh Water pump pops the circuit breaker! You will need to turn it off, and back on to restore fresh water. (Not so nice when mid shower, but hopefully your boat mate can cycle the breaker for you!)

GALLEY

But first, COFFEE.....

JUNEAU has a FRENCH PRESS Coffee pot. Re-usable press filter, and grounds can be dumped directly overboard. 4 scoops (or to your taste) of coffee, fill French press with boiling water, wait 4 minutes, and gently press down until fully seated. Press is insulated, and stainless steel, so store your second cup in the press.

Stove

The stove on JUNEAU is **ELECTRIC INDUCTION**. This requires the pots/pans/kettles to be steel, and NOT ALUMINUM, for the induction to work properly. (Magnet test will indicate if the equipment will work). All equipment provided on JUNEAU will work, but do be aware if you bring your own cookware.

Turn on the “STOVE” breaker on the AC panel.

Power ON the cooktop by holding the control button on stove control panel

Power on the heater you are using, and power level.

When finished cooking turn off cooktop using control panel POWER, and also switch OFF the circuit breaker.

This induction stove does come with some “quirks”. Error codes!

I find the easiest way to clear the error codes is to cycle the CIRCUIT BREAKER for “STOVE” OFF/ON, and re-power up stove top.

Common Codes:

E3/E4 – pan/cooktop is too hot. Either wait, or power down circuit breaker “STOVE”, and power back up and reduce power levels.

E10 – Too many buttons pushed. This often happens with water or something else on the control portion of the cooktop. Power down circuit breaker “STOVE”, and power back up.

E5 – No pot, or Non-inconductive pot

The Oven manual is located in the port side forward cabin binder if you need to review other errors.

Microwave

The microwave on JUNEAU is **MICROWAVE and CONVECTION OVEN**.

When on shore/generator power, normal operation, remove metal rack for microwave.

It can also run off the **inverter** at **POWER LEVEL OF 3 OR LOWER**. Above power level 3, unit tends to shut down. Would recommend inverter microwave use ONLY if the main engine is running (underway).

Refrigerator

The REFRIGERATOR is dual voltage (12-volt and 110-volt power). It will automatically use 110-volt power when the shore power is connected; otherwise, it will operate on 12-volt power. YOU CAN CONTROL WHICH POWER SOURCE IS USED BY THE CIRCUIT BREAKERS SELECTED !!

110V Breaker marked “AC REFRIGERATOR”

12V Breaker marked “12V REFRIGERATOR”

Monitor the use of the refrigerator when the engines are not charging the 12-volt battery system. The local on/off/temp control is located in the upper back of the refrigerator section. It can be turned down to the lowest position when anchored or moored or turned off when turning in for the night at your discretion. With JUNEAU house battery banks, and running engine or generator 30 minutes once per day, there should be no concern of running refrigerator at all times.

Minimizing openings helps a lot!

DINING TABLE

Salon Table is easiest to maneuver around either fully folded, or rear leaf folded.

When unfolding, ensure to PULL OUT SUPPORT ARMS from below table to support the leaf.

Please do not put any bare glass ware on wood, we have many coasters aboard to use.

To DROP the table, to make a bed or comfortable TV viewing at the end of a long day:

- Loosen both knobs under table several turns

- Push down table from above using body weight (it is compressed spring to keep it up)

- Tighten both knobs under table

- Mattress is located above closet in forward cabin

HEATING SYSTEM

JUNEAU has 2 COMPLETELY INDEPENDENT HEAT SYSTEMS

110V AC Reverse Cycle Heat Pumps (Heat and Air Conditioning)

2 zones, CHROME Digital Controllers located

Overhead thermostat at main helm (for MAIN SALON)

Forward Cabin thermostat at nightstand (for FORWARD CABIN)

12V DC Engine Hydronic Heat Loops

3 zones / 1 loop, BLACK switch Overhead and BLACK Thermostat Controller

Overhead thermostat at main helm (for MAIN SALON)

Flybridge rocker switch (for FLYBRIDGE)

Water Heater (Automatic, when loop is active)

110V AC Heater/Air Conditioner

When on Shore Power or Generator, Reverse Cycle Heat Pump is available.

Turn on Main Circuit Breaker 110V "AIR CONDITIONER"

Press power button on Chrome Controller for individual zone.

Select heat (or cool), and +/- for temperature.

19 deg C = 67 deg F

15 deg C = 60 deg F

This system works by pulling in raw water, through raw water strainer, extracting heat from raw water, then discharging flow overboard. You will hear/see continuous water flow from the starboard midship and/or port forward near waterline when the heater is active.

(On several occasions, good samaritans have thought this was a bilge pump running....)

Check Sea Strainers and Sea Cocks to ensure these are open/flowing if there are any problems. Strainers are located port and starboard in main engine bay on forward bulkhead.

Prior to unplugging shore power, or shutting down generator, ensure the chrome controllers are powered OFF. **Unit will likely continue to run for several minutes in shutdown procedure.** It is best to let this complete before separating power or shutting off main circuit breaker.

12V DC Engine Heat Hydronic Loop

This Hydronic Engine Waste Heat is available while underway. The engines provide heat in the same way as a car heater. Turn on the Circuit Breaker 12V "CIRCULATOR PUMP". Turn on the MASTER ROCKER SWITCH located main helm overhead, FAR LEFT.

This has now energized the hydronic heat loop, but has not activated air fans/zone heat.

MAIN SALON – Air temperature is controlled by **BLACK THERMOSTAT** located main helm overhead, LEFT. Slide switch to "HEAT", Set desired temperature with +/- . Fans will not kick

on until the hydronic loop reaches a certain temperature (to prevent cold air from blowing). So, it may take several minutes (or 10 if engine is still cold), before air blower activates.

FLYBRIDGE – There is only an **ON/OFF ROCKER SWITCH** located on the flybridge. The Master Rocker Switch (located main helm overhead, FAR LEFT) must be ON, for this system to be operational.

On flybridge, activate rocker switch, and fans will blow. Heater tubes can be pulled out of the floor and placed under your jacket/blanket to keep you toasty warm while still in the open air of the flybridge. Flexible tubes are fragile, so handle them with care.

When engines are not running, turn the MASTER ROCKER SWITCH (overhead) **OFF**. It will run batteries down fairly quickly if no charging present.

ELECTRONICS

All electronic manuals are stored in Master bedroom, port side upper cabinet. These are all original, so please ensure they are put back when finished.

VHF Radio

There is a master VHF Radio located Main Helm Overhead.

There is a “Repeater” VHF Handheld that can be used on the flybridge when operating there. It is stored in a charging cradle at the main helm, directly forward of the main chart plotter (facing forward towards window). You can remove it, turn it on, and have full control of the main VHF via this repeater.

Ensure the Circuit Breaker “VHF RADIO” is on prior to any operation of the vessel. Always monitor channel 16 while underway.

There is also an independent hand-held VHF in a charging cradle located on the dash forward of main helm. This is intended to be used in the dingy, or as a backup.

SIMRAD MULTI-FUNCTION DISPLAY - CHARTPLOTTER

This is a new networked SIMRAD NSS EVO-3, 12” display

Both touch screen and knob/button controls

You can choose the screen layout to fit your need.

Typical layout will be AUTOPILOT/CHARTPLOTTER/Data Logger

When running RADAR or wanting scrolling bottom depths, you can make those screens larger.

Depth Sounder

There is DEPTH SOUNDER functionality built into the SIMRAD chart plotter. Transponder is located in the lazarette hull, starboard side.

You can see depth display numbers on the right side of SIMRAD plotter, or you can pull up the dedicated scrolling graphic depth sounder. (General cruising, the digital number on right side is sufficient, and allows chart to be full screen)

Remember to ALWAYS consult your charts for depth!

RADAR

To operate the RADAR, select the RADAR display on the SIMRAD. On touch screen, swipe down from top of screen to access quick menu, and enable RADAR TRANSMIT. When not actively using RADAR, place it into STANDBY mode (same finger swipe down, from top of screen to access quick menu).

Refer to the quick reference guide in the DOCUMENTATION file, under Electronics for more instructions. PLEASE return these to the folder when done.

Remember you are not allowed to travel in FOG or in serious wind conditions.

Global Positioning System (GPS)

The SIMRAD had integral GPS, that is also fed to VHF DSC Radio.

Note -- GPS is considered a navigation aid. Do not rely on it. Compasses, charts, and dividers are the tools to plot position, course, and speed.

ENTERTAINMENT SYSTEMS

Stereo

There is a portable BLUETOOTH Speaker located main salon starboard side aft on the shelf. It can be paired with any of your devices to have music wherever needed on JUNEAU.

Power button located on the end center. Pairing button is located on the end, smaller button. Press and hold until blue light blinks quickly.

TV/DVD

A TV/DVD is stored in the entertainment cabinet drop down from the overhead, port side.

Remote controls are located on Velcro mounts, inside the drop down cabinet, inboard side, look up and under cabinet lip. Press them hard to re-install. Heavy Duty Velcro.

If having difficulty with DVD controller, move closer at direct view to DVD, as it is tucked up high in the cabinet. You can also use manual buttons, they are labeled on face of player, but buttons are on top out of view.

ANCHORING

The primary WORKING ANCHOR is attached to 32 ft chain and 390 ft nylon line (**425 ft total length**), passed through the deck from the ANCHOR LOCKER. The locker can be accessed through the bow locker hatch.

The anchor rode is color coded with zip ties, at 25 ft increments.

RED, BLUE, YELLOW, BLACK, single ties up to 100 ft.

Double ties up to 200 ft

Triple ties up to 300 ft.

The WINDLASS has a clutch drive, and the WINDLASS ARM is stored in the Forward Cabin Closet. It is not normally used, but can be accessed to tighten up windlass clutch if it is slipping (Turn it clockwise, on windlass to tighten clutch)

Normal operation will be to power up and down the anchor with electric controls.

Un-cleat and un-clip anchor keeper line. ALWAYS re-clip and re-tie anchor keeper line after stowing anchor.

Dropping the anchor can be done easily with 2 people, and can control drop from EITHER helm station, or on bow.

RETRIEVAL OF ANCHOR MUST ALWAYS BE DONE AT THE BOW, WITH THE HAND HELD REMOTE.

Visibility, rode binding, and windlass awareness are key, while retrieving.

The WINDLASS CONTROL is a handheld remote located in the bow locker hatch. At the bow, momentarily activate down to provide a small amount of slack in the chain. Tip the anchor just over center and gently begin lowering the anchor. If necessary, guide the anchor over the anchor roller to prevent binding on the pulpit. Be careful of pinch points.

Let out sufficient ANCHOR RODE (chain and nylon line) before setting the anchor. Colored markers are placed every 25 feet on the chain and nylon rode, indicated amount of rode. If the anchorage is crowded put down at least a 3 to 1 scope (60 feet for 20 feet of water), back the anchor in with a short burst from the engine. Then let out additional scope dependent upon conditions. After full scope is set, pull in some slack, and tie off anchor rode to center bollard, with several cleat hitches, to take load off windlass.

Before raising the anchor, ALWAYS start the engines as the windlass uses large amounts of power.

NEVER RETRIEVE USING HELM WINDLASS CONTROLS!!

Motor forward briefly towards anchor, to give slack, and un-cleat from bollard. Activate UP on windlass control (**MUST BE DONE AT THE BOW, WITH HANDHELD REMOTE**). As the boat moves toward the anchor, press the 'up' control to take up slack line. Give the windlass short rests as you are pulling it up. If necessary, idle the boat forward with then engine by placing briefly in gear to put slack in chain. Place yourself in position to guide the anchor onto

the roller. As the anchor rises, be careful not to allow it to swing against the hull. Wash it down as it comes up if it is particularly muddy.
It is RAW WATER at the bow washdown.

Re-clip the keeper to the anchor and tighten and cleat off to the bollard using the black line. Bump windlass down to take strain off windlass. Stow handheld remote back in anchor locker.

A SPARE Danforth style ANCHOR is normally stowed under the mattress in the forward berth. It is equipped with 20 feet of chain, and 150 feet of nylon rode. **Attach the rode securely to the bow bollard BEFORE deploying by hand.** This is not intended to be used under any normal operation, only in emergency situations/loss of primary anchor.

Anchor Lights

Anchor lights are controlled from the main helm overhead switch “ANCHOR LIGHT”.

The mooring light requires the Circuit Breaker “TANK GUAGES” to be ON.

When mooring overnight, you will get in habit of turning off many systems at the breaker.

REMINDER, keep the **TANK GUAGES** breaker on, to ensure the anchor light is operational!

Stern line

Some anchorages are deep and often crowded. During the summer months, it is often a good idea and may even be required to set an anchor and stern-tie to shore. If you are uncertain about how to do this, please contact a member of AYC or consult the onboard Chapman’s guide. It is not hard, but does require a bit of practice.

For your convenience, JUNEAU is equipped with 300ft of stern line mounted to the starboard aft flybridge rail. Take the line ashore with the tender and attach it to a solid object. Some anchorages may have metal rings used for this purpose. Otherwise, use a tree. Once secured, take in the slack and firmly attach it to one of the aft cleats in the cockpit.

DO NOT USE THE STERN TIE WHEEL AS THE ANCHOR ON THE BOAT.

Mooring Cans

The State Park Sticker on your vessel allows you to pick up the MOORING CANS in the parks for FREE! You only need to register at the kiosk usually located at the heads of the docks. Bring the decal NUMBER from the boat for registration. Mooring cans have a metal triangle at the top upon which is a metal ring. The metal ring is attached to the chain which secures your boat. IT IS VERY HEAVY. The strongest member of your crew should be picked for this job.

Come up to the CAN into the wind or current as you would for anchoring. Have crew members on the bow, one with a boat hook and one with a mooring line secured like a bow line. As you are coming slowly up to the can have the crew holding the boat hook point at the can with the hook so the skipper always knows where it is. Hook the can and bring the ring up to the boat to allow the second crew to thread the ring with the line. Release the hold with the boat hook. If your mooring line is led out the starboard chock bring the end of the line back through the starboard chock. Repeat with another rope on the port side.

To prevent sawing motion from cutting lines, we recommend running 2 independent lines through the mooring ring, one line port bow cleat, one line starboard bow cleat, tied off at same lengths. (port cleat through ring, back to port cleat)

BARBECUE

The BARBECUE is permanently mounted to the aft cockpit rail. There is a large Propane bottle mounted directly below. **PROPANE VALVE ON TANK SHOULD BE CLOSED AFTER EVERY USAGE.**

Tray stores inside BBQ, and upon opening, can be moved to mount on front lip of grill. Griddle can be placed over Grill, and is located below the sink.

After opening bottle, and turning on controlling valve at BBQ, carefully light the unit, preferably with a long-stem butane lighter.

In windy conditions, you can wrap aluminum foil around the outside of the BBQ to prevent wind from blowing out or removing heat from the BBQ.

Note: Propane bottle is filled at each charter by AYC. This is a specialized size/dimension tank, and will not be swappable. It can however be filled at any propane station, and an originally full tank should last throughout your charter. To remove the tank, loose hose clamps until they open up.

*Caution -- For safety reasons, do not store any propane bottle within the salon or engine compartment. Propane gas will settle into low spaces. **Store any bottles in the cockpit aft rack space.** Ensure gasoline and flammable materials are not near the barbecue.*

DINGHY & OUTBOARD MOTOR

Your Achilles 9'6" inflatable DINGHY with a 4 HP engine is stored on the aft swim deck. It has a capacity of 860 pounds (motor, equipment, and 4 people).

Please keep in mind that this dinghy is fully inflatable, both pontoons and keel.

Dinghy will be damaged if brought up on rocks, barnacle shells, or unsmooth beaches.

Do not drag the dinghy on the beach.

2 people can easily lift the dinghy for moving, and 3 people may be needed with motor mounted.

The deploy, retrieval, and motor mounts are all **MANUAL LIFT & OPERATION**.

TO DEPLOY:

- To deploy the dinghy, tie off the DINGHY ROPE to the top of the rail of rear cockpit, with enough slack to allow dinghy to rotate fully down to water.
- Unclip the black strap bridle holding dinghy vertical, and **HOLD IN YOUR HANDS**.
- With your feet on the inside edge of the stainless steel threshold for traction, **Slowly** lower the dinghy by the black flat strap, to the water, noting that the dinghy gets heavier as it nears the water.

KEEP DINGHY ATTACHED TO SNAP-DAVITS WHILE MOUNTING ENGINE

Motor can be manually lifted into the center of the dinghy, and then placed on the rear transom as a second step.

Open Fuel Valve on port side of engine (rotate to vertical)

Open Fuel Vent on top of filler cap.

**** This happens often! Engine shuts down due to lack of fuel supply****

Pull Choke out

Pull to start, and slowly move choke in as it warms up.

Weaver Snap-Davits are used. With pressure off the davit, **SLIDE** the davit clip **FORWARD**, to open clip and lift dinghy out of davit.

It is recommended to get dinghy loaded, running, and ready to go before unclipping davits. They will hold the dinghy very securely.

A 1 gallon fuel can is also provided, and stored in the aft cockpit shelves.

IT IS ALWAYS RECOMMENDED TO BRING THE 1 GALLON CAN IN THE DINGHY WHEN IN USE.

TO RETRIEVE:

- Snap davit clips into the sliding davit.
- Close Fuel Valve on port side of engine (rotate to horizontal)
- Close Fuel Vent on top of filler cap.
- Lift motor to center of dinghy, then to swim step bracket
- Loop flat black strap around dinghy white side rope (in length between oarlock and mid bench)
Center (equalize) length on both ends of strap

- With your feet on the inside edge of the stainless steel threshold for traction, **LIFT** the dinghy by the black flat strap, **up AND PAST VERTICAL**, taking most of the force off the strap.
- Route strap around aft cockpit rail (red), with 2 locations on dinghy (blue), making a “doubled back V”.



- **TIE UP** dinghy bowline to same location on the aft cockpit rail, to allow easy passage through the aft cockpit doorway.

YOU MUST TIE UP THE DINHY BOW LINE, OR IT WILL FOUL THE MAIN PROP IF DROPPED IN THE WATER!

Dinghy is **NOT TO BE TOWED**, and may only be transported clipped into davits and stowed vertically.

Coast Guard regulations state that any child 14 and under must wear a life jacket in a dinghy. It is a good idea for **EVERYONE** to follow this rule.



CRABBING & FISHING

Always check the fishing and crabbing requirements before you leave on your cruise. You will need a license. Many areas are **CLOSED** to crabbing and fishing on certain months.

CRAB AWAY FROM THE BOAT! Lines can get wrapped around props. Fish-flavored cat food with the pop-top lids and/or frozen chicken backs work the best for a nice neat way to bait your pots. Bait bags should be tied to the center of the pot, so they hang **JUST OFF THE BOTTOM** of the trap. Too long and it hangs up the trap doors, too short, and crab crawl on top of the pots, not in them.

After 1.5-2.5 hrs soak, retrieve the crab line and pot. Be certain of water depth before lowering crab pots; make certain the buoy line is long enough for the depth **PLUS 20 ft for tide and current.**

CRAB POTS ON JUNEAU HAVE 100 FEET OF LINE, AND 2 BOUYS EACH LINE.

Measure the crabs using the **CRAB MEASURING GAUGE** normally located in pull out drawing under main salon settee. Keep the male crabs of proper size (usually 6 ¼ inches across the carapace). Cleaning crabs before boiling saves space in the pot and makes for a much cleaner move from pot to table. Boil crabs about 12 minutes to cook.

After using, wash equipment thoroughly with fresh water (available from the cockpit shower faucet). Store pots on **TOP DECK**, aft of the upper deck railing. **EVERY POT SHOULD HAVE A TIEDOWN STRAP THROUGH IT SOMEWHERE, AND TIED TO RAILING, AND SIT ON TOWEL OR PAD (not directly on fiberglass)**

Note -- Please do not store wet pots and gear inside the boat.

OTHER: Safety & Bilge Pumps

SAFETY should be paramount in your daily cruising. A MAN OVERBOARD DRILL should be discussed and perhaps even practiced with a life jacket. Remember your lifejackets are stowed under the main salon settee. Your flares and safety equipment are located in pull out drawer under the main salon settee. Validate locations

JUNEAU is equipped with **3 AUTOMATIC BILGE PUMPS**. The master switches are located at the main helm, directly in front of the wheel, lower left. Normally, the switch will be left in the AUTO position. You may occasionally hear the pump operate due to condensation and water from the shaft log accumulating in the bilge.

Bilge pumps are located in:

- Main Engine bay, aft of engine
- Forward cabin, under mattress
- Under stairs, (shower sump bilge)

The ENGINE SPARES BOX is stowed under the Forward Cabin Mattress. This includes oil filters, oil/fluids, fuel filters, raw water impeller, replacement pumps, and other small parts.

The RUDDER has an EMERGENCY TILLER, located in the Forward Cabin Closet. Stainless steel.

It can be placed on the top of the rudder shaft, and operated by hand from within lazarette in case of any steering emergencies.(requires 2 people for operation)

THRU-HULL LOCATIONS

LAZARETE:

Raw Water Cooling – Generator – Starboard FWD - Seacock

Generator Exhaust – WET

Generator Exhaust – DRY

Main Engine Exhaust – WET – Starboard AFT

MAIN ENGINE BAY:

Propeller Drive Shaft – Center AFT

Raw Water Cooling – Main Engine – Port FWD - Seacock

Forward Cabin AC Raw Water – Port FWD - Seacock

Main Cabin AC Raw Water – Starboard FWD - Seacock

Bow Raw Water Washdown – Starboard FWD – Seacock

Macerator Discharge – Starboard Mid - Seacock

FORWARD CABIN:

Bow Thruster – Center FWD

Below water line picture



WRAPPING UP:

Leave yourself an hour to unload and clean up JUNEAU.

Please leave everything covered when you leave from your vacation, and then close the blinds.

Make certain every utensil, pans, china, plates, cups, etc. are clean and put away in the proper locations.

Return all paperwork, manuals, charts to their original storage location

We hope you enjoy your trip! If there are any questions, do not hesitate to call Anacortes Yacht Charters.

If you have any suggestions as to how this Operation Manual might be improved, please let AYC know.