# DREAM MAKER

March 2022

## **OWNER'S NOTES**

# Rick & Cheryl DuBose



#### WELCOME TO DREAM MAKER

The purpose of the these owners' notes is to acquaint you with the systems and supplies on the boat. Hyperlinks located on the final page will open short videos on YouTube showing where systems are, what they do, and how to use them. These are in no way meant to be exhaustive and no warranty is implied. Full owners manuals are located in the Pilothouse for more in-depth study.

ream Maker is a 2017 American Tug 365 (36' LOA) which entered the SJS fleet for the 2019 season. Owned by Rick and Cheryl DuBose, she is the second boat they have offer for charter through SJS. What's great about this boat?

She is gorgeous & everything works! High quality leather furniture, beautiful African Mahogany/Pine floors, and hand made cabinetry add warmth and light to the space. Quality bedding, appliances, and a spacious, clean, organized engine room are a joy. A large kitchen with legit gear allows the serious chef to spread out and get "cooking"!

She is safe. A semi-displacement hull, hand-laid in La Conner, Washington can cruise 7-18 knots on as little as 2-3 gallons/hr. Stable, quiet, and built like a tank, you'll stay warm, dry, and relaxed. A 10.5' Achilles deluxe RIB with center console steering, a 20 h.p. Electric start motor, plus a powered davit wench makes for great exploration.

She is comfortable. From the 32" HD TV with DVD, Roku, and a fine sound system, to the custom-made inner spring mattress with 3" memory foam topper, you'll feel pampered. A real bathroom has a large home-style shower stall, plenty of hot water, and an electric porcelain head that macerates each flush. The leather settee makes into a queen-sized bed for guests, the kids, or movie night. Plenty of power is always available via a very quiet diesel 6KW generator as well as strategically placed inverters/plugs. We even provide 2-way hands-free headsets to make docking stress-free. She is a passage-maker. Outfitted with a 380 h.p. EFI Cummins diesel, state-of-the art dual touch screen Garmin chart plotter/radar and digital engine monitoring, she is a "dream" to captain. 400 gallons of fuel, 120 gallons of water, and plenty of storage mean you can drop a hook or travel extended periods with ease.

We love this boat and you will too. Treat her like your own. We want your time on her to be "the things that dreams are made of". Explore the islands and anchorages to your hearts content. If you have any suggestions for improvements, let us know. We would be happy to hear from you for any reason. We want Dream Maker to far exceed your expectations!

Rick and Cheryl DuBose RDCDSJ@gmail.co

### **TABLE OF CONTENTS**

1.	EMERGENCY & SAFETY EQUIPMENT	4
2.	ELECTRICAL SYSTEMS	
3.	ENTERTAINMENT	
4.	EQUIPMENT	
5.	GROUND TACKLE	
6.	NAVIGATIONAL EQUIPMENT AND ELECTRONICS	13
7.	PROPULSION	17
8.	TENDER AND OUTBOARD	19
9.	SEWAGE	
10.	WATER SYSTEM	20
11.	ADDITIONAL EQUIPMENT	21
12.		
13.		
14.	MISCELLANEOUS	<b>2</b> 3
15	VESSEL INFORMATION & SPECIFICATIONS	2.4

#### 1. EMERGENCY & SAFETY EQUIPMENT

#### **FIRST AID KIT (Front Cabinet)**

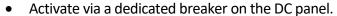
An *Adventure Advanced Medical first-aid kit* contains multiple modules for various issues. There is a small first-aid kit in the dinghy bow box.

#### PFD's

- (2) Class V (wearable, automatic/manual) PFD's are hung on hooks for use when docking, & anytime you are on the forward deck, or using the dinghy.
- (8) Class III PFD's located in a large blue bag in the aft cockpit floor locker on the starboard side of the boat if needed.
- Life-sling system Class V mounted on the upper deck next to the ladder in case of MOB.
- You can obtain additional sizes thru SJS.

#### **VHF RADIO(S) (COCKPIT)**

Mounted in the pilothouse above the navigation station. It has built in AIS/DSC for collision avoidance and emergency response.



- The top button is VOLUME.
- Lower (big) button for CHANNEL select/weather radio.
- Emergency button will broadcast your location to USCG.
- A Hand-held portable radio plugged into the DC plug at the navigation station.

#### FIRST-ALERT CARBON MONOXIDE DETECTOR

Installed at the factory & operated by 12 VDC, this system has sensors located throughout the boat (next to microwave, in stateroom). They cannot be deactivated.

#### **SMOKE DETECTOR**

Battery operated and located above the navigation station on the stbd. side & operates just like a home unit.









#### **EMERGENCY FLARES/FLASHLIGHTS**

- (4) Emergency and Parachute flares are located in the mesh bag (front cabinet). There is an additional hand held flare in the dinghy bow equipment box.
- (2) Flashlights are located at the Navigation table

#### **ACR EPIRB (Front Cabinet)**

Requires manual activation. It will emit an emergency signal activating search and rescue.

\*For use only in a "MAYDAY" situation.

#### **FIRE EXTINGUISHERS**

#### Manual Hand-held:

(2) Kidde marine-type B/C portable dry chemical fire extinguishers.

- #1- Stateroom, forward port cabinet wall.
- #2- Behind the Captain's seat.

#### **Automatic System:**

A Fireboy clean agent automatic fire extinguisher is permanently mounted in engine compartment.

- Fire in the engine room will AUTOMATICALLY activate, cutting fuel to the engine and generator.
- The bottom over-ride switch allows you to RESTART the engine when situation is under control.



#### XINTEX PROPANE FUME DETECTOR & SOLENOID CONTROL

This system protects against inadvertent propane leak. If a leak is detected, the system will automatically stop flow from the tank in the propane locker.

- Press the CHECKMARK on the lower R to TEST the system.
- Press the lower L button to turn ON fuel to the stove. The valve light will turn GREEN.



#### WINDLASS CLUTCH TOOL

Located in the bow deck box.

#### **SPARES**

Spares are mainly in the engine room in appropriately marked boxes. Small spares like light bulbs, screws, fuses, etc. are in the salon locker.



#### 2. ELECTRICAL SYSTEMS

#### **BATTERIES & VOLTAGE**

(2) 4D AGM (house), (1) 4D AGM (engine), and (1) group 24 AGM (auxiliary generator) in 12 VDC banks are located under the floor in the salon on either side.

They are sealed and need no maintenance.



#### MAIN DISCONNECT AND INVERTER(S)

The MAIN 30 amp. Breaker isolates incoming AC and is located behind the settee.

- It will TRIP if more than 30 amps. Is called for.
- Check this FIRST if the AC power is not functioning.
- Rotary circuit isolation switches are located beneath the floor in the salon aft.
- A 1000-watt Xantrex inverter is located on the port side underneath the settee and is connected directly to the house battery bank via a remote on/off switch at the entertainment center.
- PUSH the button adjacent the TV (green means on) to power all the video entertainment and the small lamp behind the TV even without AC power connection or generation.
- A separate inverted power AC plug with 2 USB ports is adjacently located. The boat does not require AC power for this plug to work.





#### **MAIN BATTERY CHARGER & PANEL**

A *Blue Seas P-12, 40 amp. AC battery charger* is mounted under the salon. <u>Colored dots next to each button show appropriate positions per status</u>

- Data is shown on the DC panel at the top. It will rapidly recharge the batteries but requires 110 VAC (generated or shore) to work.
- The engine ALTERNATOR will also charge the battery while underway, but more slowly.
- The RED switches (on the DC panel) should be remain in the AUTO position.
- The 12 VDC breaker panel is located (top panel) in the pilothouse.
- Each circuit is ISOLATED allowing precise control of all battery-operated circuits.
- The RED read-out on top shows battery bank status.
- TOGGLE the switch underneath the screen to check each bank: house, engine start, or generator start.
- Voltage, charge (in amps), draw, and resistance are measured and can be displayed or toggled.
- A discharge ALARM is set for 12.3 volts (50% charge). It will go off when the house battery back reaches this level. At that point, recharge the batteries.
- FULL charge is 12.8 amps.



#### AC SHORE OR GENERATOR POWER PANEL

- 110 VAC 30A power (bottom panel) is delivered by plugging the boat into shore power. 50A 220 VAC is output via the generator.
- All AC circuits are isolated.
- The read-out on panel top shows current AC draw (amps or volts).
- There is a lockout slider switch on this panel that will not allow the generator to be activated <u>if</u> the 30-amp shore power is on.
- Choose one or the other.
- When CHANGING between AC, DC, shore, or generator, power everything down first at the panel by unloading the system one circuit switch at a time.
- Turn OFF the main breaker for THAT panel.
- When bringing power up, turn on the main breaker, then each desired circuit sequentially.
- If shore power doesn't turn on, check the following:
  - a) Is the breaker on the shore pedestal flipped on?
  - b) Is the shore power cord securely connected at both ends.
  - c) Has the primary breaker on board tripped? This breaker is located in the salon, on the port side behind the settee seat back at the aft end.

#### **AUXILIARY GENERATOR**

A Northern Lights 6 kW diesel auxiliary generator with heat exchanged cooling and wet exhaust in a full sound enclosure is located in the engine room on the PORT side. A side panel is removable for access to fluid levels and refill ports. (See Quick-Start video for algorithm on YouTube)

#### **BEFORE USE:**

- CHECK the fluid levels (oil and anti-freeze) and that the cooling water THROUGH-HULL fitting is OPEN BEFORE first use.
- The generator produces 50 amps. (220 VAC) which is capable of powering everything on the boat simultaneously plus rapidly recharging the battery.
- AC battery charger must be ON for rapid charge.
- Diesel engines like to be "loaded", so activate every AC circuit you wish for 30-60 minutes after starting.

TO START:

<sup>\*</sup>This is a great way to recharge your batteries and heat up water when you are off shore power. Fuel consumption is about a pint/hour of diesel.

- 1. MAKE SURE the thru-hull valve is open in the engine room (stbd. side).
- 2. LOCATE the starter switch in the passageway next to the stereo.
- 3. Depress PREHEAT/BYPASS switch on for 3-5 seconds
- 4. Simultaneously depress the START button and HOLD BOTH for 5-10 seconds.
- 5. Release BOTH. The generator should be running.
- 6. Let it warm-up for a couple of minutes.
- 7. At the AC breaker panel, turn the 30 Amp. Shore power breaker OFF.
- 8. MOVE the lock-out switch UP from shore power to GENERATOR
- 9. Push the generator switch ON and bring circuits back on line

#### TO STOP:

- "UNLOAD" the generator and allow it to run for several minutes by turning off the GENERATOR main.
- Push STOP until the generator is no longer running.

#### 3. **ENTERTAINMENT**

#### **FURION CD/DVD/STEREO SYSTEM**

- This is located under the co-pilot seat in the companionway.
- It is activated by depressing the red button or via a small remote velcroed next to it.
- 3.5 mm and USB input is available (Top drawer, port side). See operation guide for more options.

#### 32" SAMSUNG HD TV

Powered by inverted AC, the TV can be utilized underway or at port. (Owner's manuals are in the "Red-file folder")

- It REQUIRES connection to the Internet to access Entertainment options including Samsung TV Plus, Netflix, Sling TV, Hulu, etc. and does not require use of Roku.
- The DVD players can be used WITHOUT Internet connection.
- You will need your own account for PAID services but there are a number of free stations available.
- Make sure you have the CORRECT remote for Internet connect via settings to the TV and/or Roku.
- Be advised that the navigation equipment generates a wi-fi called DREAM MAKER. It's only for the Garmin systems.

#### **SONY DVD PLAYER**

Located behind the TV, it is attached via HDMI to the TV.

- Make sure you are using the SONY remote to control this device.
- A modest selection of DVD's is located behind the TV in a black leather folder.







#### **ROKU PLAYER**

This is the easiest way to get access to various streaming services.

- 1. Turn on the TV.
- 2. Turn ON Roku and allow it to boot up.
- 3. Press the HOME button.
- 4. Curse to SETTINGS and make connection to Internet.
- 5. PUSH home and make your selection.

#### **EQUIPMENT** 4.

#### **WINDLASS**

A Lofrans Tigress 12 VDC horizontal capstan with foredeck power up/down control foot switches is available to deploy and retrieve the main anchor. Emergency manual handle located in the bow deck box.



- CONTROLS are on deck and foot operated via marked up/down foot switches.
- The BREAKER for the windlass is located on the starboard side of the forward berth.
- This device pulls a lot of power. Check this breaker first if the windlass if the windlass does not operate.
- Take the TENSION off the windless using the attached tie-down when not in active use.



#### **BOW & STERN THRUSTERS**

A front and rear propeller allows precise control of fore and aft boat movement via a controller at the helm with 2 joysticks.

#### TO USE:

- Push and hold both ON buttons simultaneously until the orange light comes on.
- Check to make sure both are OPERABLE before use.
- These thrusters work like a "joy-stick". Use in short bursts to avoid burn-out.
- To use REMOTE controller, the MAIN controller must be on FIRST.
- PUSH ON and check operation.
- Turn OFF system when done.
- The system may TIME-OUT after several minutes of non-use.
- The main controls and remote may be used at the SAME time.
- The main cut-off is located aft in the salon locker which may be a reason if the system is not operating.
- It must be OUT for to work.









<sup>\*</sup>The cut-off for the BOW THRUSTER unit is located under the stbd. side of the forward birth above the windlass breaker.

<sup>\*</sup>The cut-off for the STERN THRUSTER is located under the salon floor, Port side.

#### **TENDER DAVIT**

A Tomco S.S. transom platform mounted system 12 VDC power winch and cut-off switch allows easy launching of the dinghy.



#### TO USE:

- The davit MAIN POWER is the last switch aft on the R, just under the counter near the entry, stb. side
- It must be ON for the winch control to work.
- The mechanics of the system are meant to be "All the way IN, or all the way OUT". BOUNCING" the winch puts a lot of stress on the supports.
- Use SMOOTH movements.
- Control for the winch is located on the rear transom.
- Red= UP
- Grey= DOWN
- The MASTER FUSE for the winch system is located in the salon floor storage locker.



(3) Rule 2000 g.p.h submersible types with automatic switches and manual overrides located throughout the boat.

- Controls for these are located at the helm
- They should be ALWAYS ON

#### SUBMERSIBLE SHOWER SUMP PUMP

A Sahara S-750 g.p.h 12 VDC operates AUTOMATICALLY when shower or sink is in use. It is located under the hatch in the head and can be cleaned by removing the lid.

#### **FUEL TANKS**

Quantity: Two

Location: Mid-ship on either side, labeled in GREEN, and require tank key to open

(nav. station). Fuel: DIESEL ONLY

Capacity: 400 gallons (200 per side)

Material: Aluminum

Shut-Off: Each tank has a sight tube to get an estimation of fuel level. It also allows each tank to be isolated if necessary.

- During RE-FUELING, when the pitch in the tank starts to change you are done.
- Check the FUEL TANK monitor in the pilothouse to "double check".
- Should you have a spill, clean up supplies are in the footstep at the helm.













#### **GALLEY EQUIPMENT**

#### Stove

Propane Force 10 gimbaled (3) burner with oven and broiler

Tanks: (1) 20 lb. steel

Shut-Off Valve: Stern locker

#### TO LIGHT THE STOVE or OVEN:

• Open the hand valve on the propane tank – located in the cockpit propane locker,

starboard side (check the arrow directions on the hand wheel for open/close).

- The green OK light on the small Xintex control panel should be on (see photo on right). The panel is located on the inboard face of the galley cabinet next to the entry door.
- Turn on the solenoid valve press the valve icon, lower left corner of the panel the valve green light should turn on.
- PUSH IN and HOLD the knob corresponding to burner you wish to light.
- When you HEAR propane flowing, push the SMALL BUTTON of the control panel.
- SPARKING will occur and the flame should ignite.
- You can light the stove with a BBQ lighter if you prefer located in the top drawer left of the stove.
- For safety, keep the solenoid valve turned off when done cooking for the day.

#### **Cooking Supplies**

Besides a full set of dishes, cups, glasses, cutlery, and, cooking utensils, there is an assortment of specialty items.

- A selection of non-perishable spices, sauces, and condiments are provided.
- A De Meyer 10.5" skillet and 3 qt. saucier are available for the serious cook.
- A large non-stick fry pan with top as well as a large crab pot, bread pan, cookie sheet, plus hand-blender round out the kitchen.
- A T-fal multi-pot cooker, Le Creuset kettle, Ninja blender, toaster, French press and Mr. Coffee are stored in various locations. Various cooking supplies are also on board.

#### 5. GROUND TACKLE

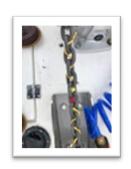
#### **PRIMARY ANCHOR**

A Lewmar 20 kilogram anchor with 400' of 5/16" G4 galvanized chain is bolted to the bulkhead inside the chain locker.

- The chain is marked with colored string at 25', 50', 75', 100', and then every 50' up to 350'.
- There are also yellow and red chain markers as well.
- An anchor "BRIDLE" located in the foredeck storage locker for a smoother experience while anchored.







#### **SECONDARY ANCHOR**

A Fortress anchor with 40' of chain and 200' of rode is located in a bucket in the cockpit storage locker. It can be used to kedge or as a primary anchor in an emergency.



## **HEATING/DEHUMIDIFIER**

#### Electric

(2) King 115 VAC baseboard installed heaters are controlled via a thermostat on each unit. Unit #1 is in the stateroom. Unit #2 is under the TV cabinet. Each unit has a separate master switch on the AC panel.



#### **Forced Air**

Diesel-fired Webasto Air Top Evo 55 heating system with (4) outlet ducts. This operates just like a home unit and runs off diesel much like a small jet engine.



#### 6. NAVIGATIONAL EQUIPMENT AND ELECTRONICS

#### **Compasses**

A 3" lighted Ritchie compass is located at the top of the helm.

There is also a hand-held compass located in chart table in a small cardboard box.

#### To access the OWNER'S MANUAL on the Chart Plotter

- Flip ON the ELECTRONICS breaker on the DC panel.
- On the chart plotter, touch the INFO tab at the bottom.
- Go to NEXT PAGE
- OPEN Owner's Manual

A more in-depth discussion can be seen on the boat YouTube channel. Full information is available in the owner's manuals and hyperlinks are included on the last (How To) page of this document.

#### **CHARTS/CHARTPLOTTER**

Paper chart back-ups, sailing guides, park information, charting instruments, etc. are all located at the nay station.



#### **Tips and Shortcuts**

- · Press to turn on the chartplotter.
- From any screen, press to repeatedly to scroll through the brightness levels. This can be helpful when the brightness is so low you cannot see the screen.
- · Select Home from any screen to return to the Home screen.
- · Select Menu to open additional settings about that screen.

#### **Charts and 3D Chart Views**

The charts and 3D chart views that are available depend on the map data and accessories used.

You can access the charts and 3D chart views by selecting Charts.

- Nav. Chart: Shows navigation data available on your pre-loaded maps and from supplemental maps, if available. The data includes buoys, lights, cables, depth soundings, marinas, and tide stations in an overhead view.
- Fishing Chart: Provides a detailed view of the bottom contours and depth soundings on the chart. This chart removes navigational data from the chart, provides detailed bathymetric data, and enhances bottom contours for depth recognition. This chart is best for offshore deep-sea fishing.

**NOTE:** The Fishing chart is available with premium charts, in some areas.

- Perspective 3D: Provides a view from above and behind the boat (according to your course) and provides a visual navigation aid. This view is helpful when navigating tricky shoals, reefs, bridges, or channels, and is beneficial when trying to identify entry and exit routes in unfamiliar harbors or anchorages.
- 3D Chart: Shows a detailed, three-dimensional view from above and behind the boat (according to your course) and provides a visual navigation aid. This view is helpful when navigating tricky shoals, reefs, bridges, or channels, and when trying to identify entry and exit routes in unfamiliar harbors or anchorages.

**NOTE:** 3D chart views are available with premium charts, in some areas.

Fish Eye 3D: Provides an underwater view that visually represents the sea floor according to the chart information. When a sonar transducer is connected, suspended targets

#### **AUTO PILOT**

The Garmin GHC 20 can be displayed on any of the units but there is a dedicated screen located on the center of the helm (bottom).

- It is not touch-screen and requires button activation.
- The autopilot is capable of fully controlling boat steering.
- When the autopilot is activated, a SHADOW DRIVE is running in the background allowing the pilot to briefly take over and hand-steer the boat if needed.
- The Autopilot should be re-engaged when the pilot stops steering the boat.
- Page 3 of the owner's manual, which is loaded in the SYSTEM as well as a ZIP DRIVE in the chart table, gives detailed instructions on the helm electronics.
- Smart Mode allows groupings of screens for various scenarios to be easily chosen with a single button push.
- Smart Mode #1 is my personal grouping of useful screens for cruising. Start here and configure as you see fit. You cannot "mess stuff up".

**Go To**: Takes you directly to the destination. This is the standard option for navigating to a destination. The chartplotter creates a straight-line course or navigation line to the destination. The path may run over land and other obstacles.

Route To: Creates a route from your location to a destination, allowing you to add turns along the way. This option provides a straight-line course to the destination, but allows you to add turns into the route to avoid land and other obstacles.

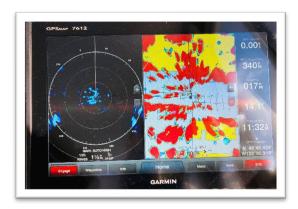
Auto Guidance: Uses the specified information about your vessel and chart data to determine the best path to your destination. This option is available only when using a compatible premium chart in a compatible chartplotter. It provides a turn-by-turn navigation path to the destination, avoiding land and other obstacles (*Auto Guidance*, page 18).

When you are using a compatible Garmin autopilot connected to the chartplotter using NMEA 2000, the autopilot follows the Auto Guidance route.

**NOTE:** Auto Guidance is available with premium charts, in some areas.

Button	Function
Þ	Clears the on-screen icons and re-centers the screen on the boat
<b>(=)</b>	Opens a full-screen view of the item
<b>Q</b> +	Creates a new waypoint
Z	Creates a route, with turns, to the destination
<b>(</b>	Adds a turn to the route at the selected location
	Removes the last added turn from the route
	Creates a direct route, without turns, to the destination
<b>5</b>	Creates an Auto Guidance route to the destination
	Begins navigation
	Ends navigation
<b>*</b>	Stops and starts radar transmission
	Opens the radar gain adjustment menu
	Opens the radar sea clutter adjustment menu
<b>③</b>	Opens the radar rain clutter adjustment menu
0	Turns on and off the radar echo trails
( <u>©</u> )	Acquires a radar target and begins tracking it
Q	Shows and sets the VRM/EBL line
	Opens the menu for the page or function
7	Opens the Weather menu for the page or function
<b>(b)</b>	Opens the Radar menu for the page or function
ŧ★	Opens the Presets menu for the page or function
	I .

#### **RADAR**



## **Transmitting Radar Signals**

**NOTE:** As a safety feature, the radar enters standby mode after it warms up. This gives you an opportunity to verify the area around the radar is clear before beginning radar transmission.

- 1 With the chartplotter off, connect your radar as described in the radar installation instructions.
- 2 Turn on the chartplotter.
  If necessary, the radar warms up and a countdown alerts you when the radar is ready.
- 3 Select Radar.
- 4 Select a radar mode.
  A countdown message appears while the radar is starting up.
- 5 Select Menu > Transmit Radar.

#### **Stopping the Transmission of Radar Signals**

From a radar screen, select **Menu > Radar To Standby**.

**TIP:** Press () > **Radar To Standby** from any screen to quickly stop radar transmission.

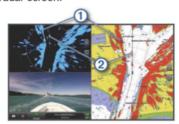
#### Radar Interpretation

Reading and interpreting the radar display takes practice. The more you use the radar, the better you will become at relying on the radar display when you really need it.

Radar can be useful in many situations, such as avoiding collisions when you have limited visibility, for example when it is dark or foggy, tracking weather, seeing what is ahead of you, and locating birds and fish.

The radar overlay feature can help you interpret the radar display more easily, because it overlays the radar returns on top of the chart. This can help you identify the difference between a radar return of a land mass, bridge, or rain cloud. Showing the AIS vessels on the radar overlay can also help you identify features on the radar display.

In the screenshot below, the radar overlay is turned on. This screen also shows a video feed. We can easily identify a few items on the radar screen.



1	Land	
2	Vessel	

#### Radar Overlay

When you connect your chartplotter to an optional Garmin marine radar, you can use overlay radar information on the Navigation chart or on the Fishing chart.

Data appears on the radar overlay based on the most recently used radar mode and all settings configurations applied to the radar overlay are also applied to the last-used radar mode.

#### Radar Overlay and Chart Data Alignment

When using the Radar overlay, the chartplotter aligns radar data with chart data based on the boat heading, which is based by default on data from a magnetic heading sensor connected using a NMEA 0183 or NMEA 2000 network. If a heading sensor is not available, the boat heading is based on GPS tracking data

GPS tracking data indicates the direction in which the boat is moving, not the direction in which the boat is pointing. If the boat is drifting backward or sideways due to a current or wind, the Radar overlay may not perfectly align with the chart data. This situation should be avoided by using boat-heading data from an electronic compass.

If the boat heading is based on data from a magnetic heading sensor or an automatic pilot, the heading data could be compromised due to incorrect setup, mechanical malfunction,

#### **AIS**

#### **Automatic Identification System**

The Automatic Identification System (AIS) enables you to identify and track other vessels, and alerts you to area traffic. When connected to an external AIS device, the chartplotter can show some AIS information about other vessels that are within range, that are equipped with a transponder, and that are actively transmitting AIS information.

The information reported for each vessel includes the Maritime Mobile Service Identity (MMSI), location, GPS speed, GPS heading, time that has elapsed since the last position of the vessel was reported, nearest approach, and time to the nearest approach.

Some chartplotter models also support Blue Force Tracking. Vessels being tracked with Blue Force Tracking are indicated on the chartplotter with a blue-green color.

#### **AIS Distress Signals**

Self-contained AIS distress signal devices transmit emergency position reports when activated. The chartplotter can receive signals from Search and Rescue Transmitters (SART), Emergency Position Indicating Radio Beacons (EPIRB), and other man overboard signals. Distress signal transmissions are different than standard AIS transmissions, so they appear differently on the chartplotter. Instead of tracking a distress signal transmission for collision avoidance, you track a distress signal transmission to locate and assist a vessel or person.

#### Navigating to a Distress Signal Transmission

When you receive a distress signal transmission, a distress signal alarm appears.

Select **Review > Go To** to begin navigation to the transmission.

#### AIS Distress Signal Device Targeting Symbols

Symbol	Description
$\otimes$	AIS distress signal device transmission. Select to see more information about the transmission and begin navigation.
$\boxtimes$	Transmission lost.
$\otimes$	Transmission test. Appears when a vessel initiates a test of their distress signal device, and does not represent a true emergency.
X	Transmission test lost.

#### AIS Targeting Symbols

Symbol	Description
Δ	AIS vessel. The vessel is reporting AIS information. The direction in which the triangle is pointing indicates the direction in which the AIS vessel is moving.
A	Target is selected.
	Target is activated. The target appears larger on the chart. A green line attached to the target indicates the heading of the target. The MMSI, speed, and direction of the vessel appear beneath the target, if the details setting has been set to Show. If the AIS transmission from the vessel is lost, a message banner appears.
×	Target is lost. A green X indicates that the AIS transmission from the vessel is lost, and the chartplotter displays a message banner asking whether the vessel should continue to be tracked. If you discontinue vessel tracking, the lost target symbol disappears from the chart or the 3D chart view.
	Dangerous target in range. The target flashes while an alarm sounds and a message banner appears. After the alarm has been acknowledged, a solid red triangle with a red line attached to it indicates the location and the heading of the target. If the safe-zone collision alarm has been set to Off, the target flashes, but the audible alarm does not sound and the alarm banner does not appear. If the AIS transmission from the vessel is lost, a message banner appears.
×	Dangerous target is lost. A red X indicates that the AIS transmission from the vessel is lost, and the chartplotter displays a message banner asking whether the vessel should continue to be tracked. If you discontinue vessel tracking, the lost dangerous target symbol disappears from the chart or the 3D chart view.
<b>*</b>	The location of this symbol indicates the closest point of approach to a dangerous target, and the numbers near the symbol indicate the time to the closest point of approach to that target.



#### **VESSEL VIEW 7 ENGINE SYSTEMS MONITOR**

This integrated system monitors all critical information about the engine as well as other boat systems. It is also used when starting the engine. Activate by turning ignition KEY to ON

#### **ENGINE START:**

- Turn IGNITION key (Blue Dot) to ON
- Set shift lever to NEUTRAL
- The Mercury Vessel View 7 will automatically activate the (Engine Info system or
- Wait for screen to say OK on EIS
- Push START on throttle or TURN KEY all the way to the R.
- Push DOCK on the throttle which decreases sensitivity to 50% for more precise CONTROL at slow speeds
- CHECK that cooling water is coming out the exhaust (stern, stbd. side)
- SELECT Vessel View preference on EIS by pushing GO TO pages then push the upper L button.
- Select the L upper most option and a comprehensive screen showing engine temperature, RPMs, battery voltage, oil, and transmission pressure will be displayed.







#### 7. PROPULSION

Fuel: DIESEL ONLY

Make: *Cummins QSB6.7-380-HOI 380 HP* is located in the engine room and accessed via pilothouse floor hatches on either side.

- The engine is checked before EVERY charter and regularly serviced.
- All fluid levels can be accessed via the PORT side
- You DO NOT need to check the levels unless you wish since more problems have been noted when the oil DIPSTICK IS NOT REPLACED PROPERLY than occur from inadequate lubrication.
- The EIS will ALARM if the oil level is low.
- Should you need to ADD oil, use the SAE 15-40 located under the co-pilot seat
- You are welcome to check the engine if you wish.
- The QUICK START guide has a nice flow sheet for checking the engine room equipment and information video is on the last page and the zip drive as well.

#### **ENGINE COOLING**

Freshwater cooling system has inflow via a THRU-HULL FITTING on the floor on the port side.

- OPEN is when the valve is inline with the hose and MUST BE OPEN when the engine is running.
- The fluid then goes thru a separator, which should be clear of any debris.







It should be checked with the engine running.

#### TO CLEAN:

- 1. **CLOSE** the intake to the strainer
- 2. UNSCREW the cap on the strainer (may) require a tool
- 3. REMOVE the screen from the strainer and clean outside (NO CHEMICALS)
- 4. REPLACE the screen
- 5. SECURE cap and tighten by hand only
- 6. **OPEN** intake valve



#### **EXHAUST**

A wet through-lift muffler exits the boat aft on the starboard side of the boat and moves water used to cool the engine through the boat and back into the water.

- When the engine is started both <u>EXHAUST AND WATER</u> should be in the in the effluent.
- This exhaust is VERY HOT. Make sure you do not block it with a fender or line.

#### **FUEL FILTERS**

The *Dual Racor Fuel Filter* provides the initial filtration of fuel before entering the engine mounted fuel filters.

These filters also block any water from entering the fuel injection system.

#### DRAINING WATER from the bowl:

- CLOSE shut-off valve to specific filter
- Be prepared to CATCH any fuel from the filter with a small container or rag
- REMOVE the plug from the bottom drain valve and slowly open the valve
- Once CLEAN fuel is escaping the bowl, CLOSE the drain valve
- RE-INSTALL the safety plug
- OPEN the shut-off valve
- DISPOSE of any contaminated fuel/water properly
- You may need to PRIME the fuel system (see Cummins manual)



#### 8. TENDER AND OUTBOARD

#### **RIB**

An Achilles 10.5" rigid inflatable (RIB) with center console and steering wheel is provided for your use.

- RIB sides should be full enough to STAND on easily.
- Refill PUMP is located in the dinghy transom storage along with other supplies and a anchor.
- Dinghy should be EMPTY of water when in use.
- Manual bilge pump is in the STERN locker.
- Make sure the INSIDE PLUG beneath the motor is in place BEFORE lowering.
- There is an EXTERNAL plug that drains the hull. CHECK it as well. This drains the "bilge" and may be emptied if needed.
- There is an extra gas can under the seat for refilling the main tank.
- Use only ETHANOL-FREE gasoline.

#### **OUTBOARD MOTOR**

The rib is powered by aTohatsu 20 hp. four-stroke with an electric start, electric trim, and electronic fuel injection. It is NOT removable.

#### TO START:

- Place the lanyard RED COLLAR around the RED button below the starter key slot
- PUMP the fuel bulb once
- Turn the KEY to the R for ELECTRIC START
- CHOKE as necessary

#### 9. SEWAGE

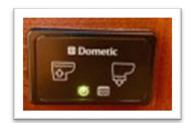
#### **TOILET**

A Dometic 12V freshwater flushing toilet is plumbed to a 46-gallon plastic holding tank. The "HEAD" and "FRESH WATER PUMP" breakers must be flipped on at the DC panel for the toilet to function.

#### To flush the toilet:

- The GREEN light on the Dometic flush controller in the head must must on. See photo on right.
- Push the UP arrow to fill the bowl as needed.
- Push the DOWN arrow to empty.
- Please DO NOT place anything in the bowel that has not previously passed through your mouth!
- Sealable BAGS are provided for soiled toilet paper.
- HELP the uninitiated as needed.





#### **HOLDING TANK**

Pump out the holding tank at a shore-side facility via the port side on-deck fitting or where legal, discharge overboard using the macerator pump.

The tank level can be checked using the tank level gauge located in the pilothouse on the overhead dashboard on the port side. See photo on right. Holding (Waste) tank is #1. **NOTE: When the tank is empty, the gauge still reads** %.



#### Using the Macerator Pump:

- \*\*\*It is against the law to empty holding tanks in US waters less than 3 miles off shore.
- Open the macerator seacock. It is labeled and located in the engine room at the forward end on the starboard side of the engine.
- Flip on the MACERATOR PUMP breaker on the DC panel.
- Turn on the pump using the macerator pump red key at the helm. See photo on right. Turn the key like you are starting a car (2 clicks clockwise) and the pump will start.
- The YELLOW light above the key will GLOW while pumping. It will auto-stop after about 10 minutes.
- Allow it to RUN until the tank monitor shows EMPTY (1/4 level) even if it requires more than one cycle of the pump.
- Turn off the red key complete.
- Contents are monitored on the tank level indicator mounted in pilothouse (#1).
- We recommend emptying the tank at 75% to avoid over-fill



#### 10. WATER SYSTEM

Fresh Water: Outlets: Three Pressure: 12 VDC Raw Water: Outlets: One Pressure: 12 VDC

\*The tanks are filled on the starboard aft close to the Diesel fill port. It requires the water key, which is a different size than the fuel fill key.

#### **WATER HEATER**

An 11 gallon with pressure relief valve is located in the engine room starboard side.

- Water is heated through the ENGINE when in use to 140 degrees.
- Water can also be heated via an electric 110 VAC activated on the AC power panel.

#### **WATER TANKS**

Quantity: Two (cross-connected 60+60)

Capacity: 120 gallons Material: Plastic Shut-Off: Yes

Accessed via a fill port on the on the starboard side

\*Individual shut-off are in the salon floor locker

#### 11. ADDITIONAL EQUIPMENT

#### TANK LEVEL INDICATOR

Allows monitoring of ALL the liquids levels on the boat. It also has warning lights for various tank conditions.

#### TO OPERATE:

- Flip the toggle switch up to ON.
- On the vessel schematic on the right side of the panel, press the numbered button of the tank(s) you wish to check. The legend key for the numbers is next to the toggle switch.
- The analog dial will ESTIMATE the amount of liquid in the tank(s).
- NOTE: When the holding tank is empty, the gauge still reads ¼.



#### MAGMA PORTABLE BBQ GRILL

This is attached to the stern rail on the port side. Fuel, water bottle, and brush are located in the Propane locker.

- It should be rotated FLAT before use
- The propane hose is attached to the main propane tank.
- The end of the hose slips into the open hole on the side of the grill
- MAKE SURE you turn to valve from the tank to the ON position.
- Please put the cover on after it cools

#### FOREDECK/ANCHOR SALTWATER WASH-DOWN

This is a seawater wash down system primarily for WASHING the anchor CHAIN down as it is retrieved back into the chain locker after being deployed. It can also be used to wash off the deck.

#### TO USE:

- TWIST the end of the coiled blue deck hose/sprayer (bow storage box) into the small water outflow hole on the bow on the port side of the windlass
- Activate the ON switch at the helm and use as you would a water hose
- DISCONNECT and store when complete



#### WINDSHIELD WASHERS/WIPERS

These wipers are variable control and can be operated individually or in combination

#### TO OPERATE:

- Turn ON the wiper switch on the DC breaker panel
- The LEFT button activates and toggles thru various speeds
- The CENTER button allows choice of individual blades
- The RIGHT button will spray the windshield with fresh water then activate the wipers

#### **HEADLIGHT FLASHLIGHT**

This is available as needed along with multiple other regular flashlights. It is stored in the headset bag on the chart table.



#### 12. TOP DECK

#### **AWNING**

A mesh covering can be easily deployed to provide shade on the top deck. It consists of 4 poles and a blue mesh awning kept in the salon floor locker.

#### TO USE:

- INSERT a pole into fittings at 4 points around the upper railing
- STRETCH the mesh and place the metal loops over the tips of each pole
- Remove and STOW when not in use

#### **ZERO GRAVITY DECK CHAIRS**

(2) loungers are strapped to the upper port railing for use.

- REMOVE from the protective cover
- Pull DOWN on the lower portion and the chairs will open
- RE-STOW when not using

#### 13. SALON

#### DINETTE/SETTEE

The Dinette table easily sits 4 for meals.

It can also be RAISED/LOWERED as needed and the top can be folded for more or less space. The lower cushion on the settee pulls out to provide more space and will into a QUEEN size bed when fully deployed.

- RELEASE the LOCKS on both ends.
- PULL the base all the way out.
- INSERT the removable leg under the lower cushion if it is fully deployed
- Place the back ALONG the base to provide maximum bed space















#### **EARTEC HEADSET(S)**

These full-duplex headsets are for communicating in a noisy environment. They make docking and outside activities on the boat much easier. A couple of finer points:



#### To PAIR, the MASTER must be on first:

- SLIDE the MASTER switch ON
- FLASHING Blue LED shows search mode
- Turn on the REMOTE unit by depressing the POWER button above the volume buttons
- The REMOTE will look for the master until it pairs
- Make sure to REMOVE the batteries when not in use, or
- Be SURE both units are OFF as they will keep trying to pair and deplete batteries
- These units have about 1/4 to ½ mile range.

#### **STORAGE**

There is storage all over the boat.

- A BIN is located under the salon floor is for bulkier items.
- SOFT luggage is recommended.
- The DRAWER under the settee is a great place to put SHOES.





#### 14. MISCELLANEOUS

- A power seat control for the Captain's bench is located just to the R of the seat.
- A stick vacuum is located in the clothes closet on the starboard side of the forward cabin
- A small canister vacuum is behind the settee.





To CLOSE the sliding doors in the pilothouse, you must pull DOWN on the LATCH on the INSIDE of the drawer.

#### 15. VESSEL INFORMATION & SPECIFICATIONS

#### VESSEL INFORMATION

Washington State Parks Annual Permit Decal - Located on the transom, port side.

**US Customs Re-Entry Decal** – Located next to the aft entry, starboard side.

**Vessel Official Number** – **1281573**. It is located inside the cockpit locker, aft end, up high on the hull. This is the same number as shown on the Coast Guard Certificate of Documentation found in Section 5, Documentation of the Charter Guest Reference Manual (white binder). Vessel Name's number is located on the starboard side and across the stern. Look for a 3" high characters.

**Coast Guard Boarding Document** – Refer to the Charter Guests Reference Manual (white binder), Section 5 Documentation. This explains what to expect if you are boarded by the Coast Guard and where to find the information and equipment they may ask to see as part of their safety inspections.

#### **SPECIFICATIONS - 2018 AMERICAN TUG 365**

36'6" Length Overall + 32'6" Length at waterline

- + 15'4" Height above waterline (to top of mast)
- + 13'3" Beam + 3'5" Draft
- + 18,700 lb. Displacement (dry)
- + 400 Gallon fuel capacity
- + 120 Gallon fresh water capacity + 45 Gallon waste capacity
- + Single Cummins 380 Hp Pilot House
- + Ultraleather covered seating for four with electric sliding helm seat, storage drawers under seats
- + Sapele overhead console
- + Intermittent windshield wipers with self park and washing system
- + Lighted compass
- + Chart storage compartment
- + Four hand grab rails, two each forward and aft of pilot house doors
- + LED lights throughout overhead
- + Red lights over chart table for night navigation
- + 12v and 110v outlets
- + Stereo system with AM/FM, CD
- + Two stereo speakers
- + Six opening windows and screens
- + One round stainles steel port with screen
- + Sliding pilothouse doors with opening windows
- + Large console for custom electronics installation
- + Hatches allowing access to engine room Salon
- + Custom Ultraleather U-shaped settee converts to double bed with storage under
- + Salon table with adjustable pedestal
- + Two stereo speakers
- + Pleated shades
- + 110v outlet

- + Three opening windows with screens
- + Hatch allowing access to tank room Galley
- + Propane cooktop
- + Upright Nova Kool Refrigerator/Freezer (freezer on bottom, 7.3 cu.ft.)
- + Microwave oven above refrigerator
- + Formica Hard Surface countertop with stainless double sinks
- + Multiple 110v outlets
- + Four drawers and four storage cabinets
- + Cutting boards custom fit to sink Forward Cabin
- + Center island queen berth (76"L x 57" W -tapered at foot)
- + Four drawers under berth
- + Cedar lined hanging locker to starboard
- + Locker with shelf to port
- + Reading lights at head of berth
- + Three-way switching for overhead lights
- + Two round stainless steel ports with screens
- + 110v outlet
- + Ocean Air Sky Screen for Bomar hatch Head
- + Masterflush fresh water 12v toilet
- + Vanity with storage and mirrors with stainless sink
- + Large fiberglass stall shower with door
- + Sapele and Maple sole
- + One round stainless steel port with screen Interior Finish/Trim
- + Sapele paneling in pilothouse
- + Sapele valances in salon and pilothouse
- + Cabinets trimmed in solid Sapele
- + Overhead and walls in marine grade vinyl with foam backing
- + High quality carpet and padding
- + 1000w electric heater in salon
- + 750w electrical heater in stateroom (silent running)
- + 28,000 btu, diesel furnace
- + 6kW Northern Lights genset with sound shield
- + Side-power 6hp twin prop bow thruster with joystick control
- + Stainless steel prop shaft with dripless shaft seal
- + Bronze 4 blade propeller tuned to class "S" + Composite rudder and skeg
- + Wet/underwater exhaust system on main and genset
- + Seawater strainers for main and genset
- + Racor filter for genset
- + Dual Racor filters for main engine
- + Oil changing system (main, gear, genset)
- + Automatic water pressure system
- + Sound deadening in engine room and tank room
- + Three 2000gph bilge pumps with automatic float switches
- + Waste discharge system with macerator
- + Electronic shift and throttle system
- + Main engine and generator spare parts kits Electrical System

- + Remotely controlled battery switching
- + AC/DC Distribution panel with backlighting + Battery combiner system for charging
- + Battery charger
- + Two 4-D AGM batteries for house (400amp hours)
- + One 4-D AGM battery for main engine start + One group 24 battery for generator start
- + 12v power buss in overhead console
- + 30amp shore power service with power cord
- + Electric defroster system for windshield
- + Dual trumpet air horn
- + International navigation lights LED type
- + 12v LED courtesy lights throughout boat
- + 12v LED overhead lighting throughout boat Steering System
- + Stainless Edson helm wheel
- + Autopilot valve system installed
- + Hydraulic pump and cylinder
- + Integral rudder port with bearing and dripless seal
- + Tank monitoring system for all tanks
- + 120 gallons water in FDA approved poly tanks
- + 11 gallon water heater with heat exchanger and 110v heat
- + Taste/odor filter for galley fresh water
- + 45 gallon waste tank
- + Two aluminum fuel tanks (400 gallons total) each with sight glass and valves
- + 1-1/2" waste and water fittings
- + 2" fuel fills
- + 316 stainless steel 1-1/4" bow rails with stainless steel burgee staff
- + 316 stainless steel 1-1/4" sundeck rails and ladder
- + 316 stainless steel bow roller assembly
- + Bomar hatch in trunk cabin
- + Color matched powder coated aluminum framed windows and sliding or hinged doors
- + Deckbox storage in cockpit
- + Access hatch to lazarette in cockpit
- + Seawater Washdown system in bow
- + Swim Platform with stainless steel edge guard
- + Transom door
- + Six stainless steel fender cleats
- + Molded non-skid walking surfaces
- + Molded fiberglass mast Safety and Mooring
- + Two portable fire extinguishers
- + Four fenders and mooring lines
- + 44lb anchor
- + Eight stainless steel mooring cleats
- + Auto fire extinguisher in engine room with auto engine and generator shut-down system
- + Lofrans Tigres anchor windlass 1500w/12v with 275' of 5/16" H.T. galvanized chain