SAILFISH
BOATS

Demand The Difference

Sailfish 236 CC Owner's Manual

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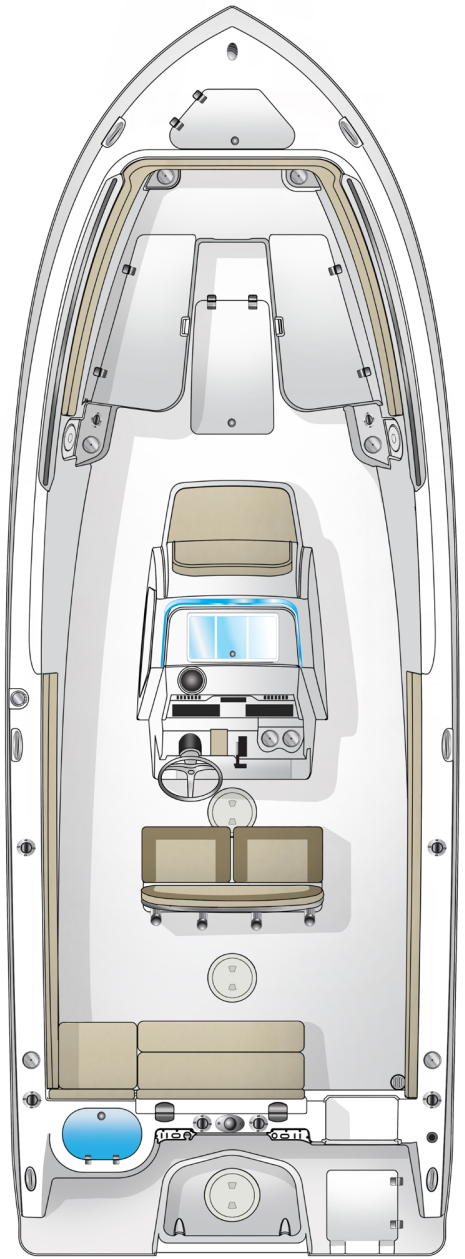
Sailfish 236 CC Specifications



SPECIFICATIONS

LOA Hull Only	23' 6"
Length Rigged	25' 6"
Beam	8' 6"
Fuel Capacity	110 Gallons
Fresh Water	14 Gallons
Weight	5,000 lbs.
Cockpit Depth Rear	27"
Cockpit Depth Front	32"
Max Horsepower Single	300 hp
Draft (Hull Only)	18"
Dead Rise (Multiangle)	22°-24°
Battery Capacity	2
Rod Holders (Standard)	10
Bridge Clearance with T-Top	8' 6"
Person Capacity	10

STANDARD FEATURES

Boat

- 10 Micron Yamaha Fuel Filter / Water Separator w/ SST Base
- Boarding Ladder (4 step with grab handle)
- Built In Rigging Tubes (From Bilge to Helm)
- Carbon Fiber & Kevlar ® Reinforced Deck & Hull
- Cockpit Bolsters
- Exclusive Dot Matrix Non-Skid
- Exclusive VDS Hull Design (Variable Deadrise Stepped Hull)
- Hydraulic Steering w/ Tilt Wheel & SST Steering Wheel w/ Power Knob
- Large door access in console for wiring access
- Oversized Bilge Access
- Pull Out Transom Shower
- Recessed SST Cup Holders (7)
- SailTech Composite Full Length Transom
- SailTech Foam Filled Fiberglass Stringer System
- SST Port Light (Head)
- Transom Mounted Tool & Raw Water Wash down Hose Holder
- Walk Thru Transom Door with Wave Guard Step

Bow

- Built in Low Profile Bow Rails
- Insulated Bow Fish Boxes with Overboard Drains (Twin 120 qt.)

Electrical

- Accessory Switch Panel w/Circuit Breakers
- Compass
- Dual Battery Switch System
- Electric Horn
- Full Digital Instrumentation
- LED Interior Cockpit & Bilge Lighting
- LED Navigational Bow & Anchor Light
- Multiple 12 Volt DC Accessory Plug

Hardware

- Engraved Transom Plate
- Fender Cleats Aft (2)
- Flush Mount Hinges, Latches & Deck Plates
- Heavy Duty SST Bow & Stern Eyes
- Heavy Duty SST Rub Rail
- Marine Grade SST Hardware
- SST & Bronze Thru Hull Fittings
- SST Cleats (6)
- SST Propeller
- SST Rod Holders (4)
- SST Split Low Profile Bow Rail

Head

- Head Compartment Lighting
- Lockable Head Door
- Mirror

Helm

- Large Dash Area (Capable of flush mounting 12" Screen)

Fishing

- Baitwell w/ LED Lighting (25 gal. Transom)

Plumbing

- 14 Gal. Fresh Water Tank
- Automatic Bilge Pump (2000 GPH Aft and 750 GPH Forward)
- Freshwater Shower at the Transom
- High Speed Live well Pickup
- Raw Water Wash down
- Self Bailing Cockpit

Seating

- AFT Flip-up Bolster Seating
- Captain's Chairs w/ Removable Cushions (2)
- Forward Helm Seat

Storage

- Anchor Locker w/ Anchor Management System
- Battery Storage (In Head Compartment)
- Built-In Insulated 27qt. Cooler/Storage
- Deluxe Walk In Console (Lockable) w/ SST Port Light
- Footrest Console Storage
- In-Floor Storage Bow
- Recessed Rod Storage - Port & Starboard
- Storage Box & Phone Station In The Dash

OPTIONS

Boat Options

- Bow Rod Holders (Std. w/Bow Shade)
- Bow Shade (For Hard Tops Only)
- Captain's Anti-Fatigue Pad
- CommandLink Plus
- Console & Leaning Post Covers
- Console Top Tackle Organizer (CTO)
- Grand Slam Outriggers w/ 15' Poles
- Hard Top / T-Top Enclosure (3 Piece)
- Netting Package
- Polished Anchor Roller & SST Scuff Plate
- Power Assist Steering (M) (Std. on 250-300)
- Power Assist Steering (Y)
- Removable Bow Table
- Thru Hull Windlass System
- Transom Rod Holders (2)
- Trim Tabs w/ Indicator Switch & Built in Retractor
- Two Tone Hard Top
- Underwater LED Lights (2)
- VesselView 4"
- Windlass w/ Polished Roller, SST Scuff Plate, Anchor, Rode & Chain

Electrical Options

- Built-In 2 Bank Battery Charger
- Built-In Solar House Battery Charger (Hard Top Only)
- Fusion Satellite Radio Upgrade
- Fusion Stereo w/ 4 Speakers & USB Port
- Fusion Transom Remote Control
- Garmin B60 Airmar Thru Hull Transducer w/o CHIRP
- Garmin B75M Airmar Thru Hull Transducer w/ CHIRP
- Garmin GPSMap 7610xsv w/o Transducer
- Garmin GPSMap 7608xsv w/o Transducer
- Garmin Radar Cable & Power Cable 30'
- Garmin VHF Radio & Antenna
- LED Lighted Speakers Upgrade

Hardware Options

- Mid-Ship Fender Cleats (2)
- Ski Tow Bar (Retractable)

Plumbing Options

- Electric Marine Head (w/ Holding Tank & Pump Out)
- Misting System (For Hard Top only)
- Porta Potti

Seating Options

- Bow Cushion Bolsters
- Bow Cushion Bottoms
- Bow Filler Cushion
- Forward Facing Bow Backrests
- LP2 Leaning Post w/ Rod Holders & Removable Backrest
- LP9 Fiberglass LP w/Baitwell & Backrest
- LP10 Fiberglass LP w/Tackle Storage & Backrest
- Rear Jump Seat (Port side)

Optional Packages

- Comfort Package (Rear Jump Seat (Port Side), Bow Cushion Bottoms & Bow Bolsters)
- Entertainment Package (Ski Tow Bar, Removable Bow Table, Stereo with USB Port & LED Underwater Lighting)
- Offshore Tournament Pack (T-Top w/ Weblon, Pull Up Cleats & Bow Light, Transom Rod Holders)
- Offshore Tournament Pack I (Hard Top, P.C, Pull Up Cleats & Bow Light, Transom Rod Holders)
- White/Black Powder Coat for Hard Top

Engine Options

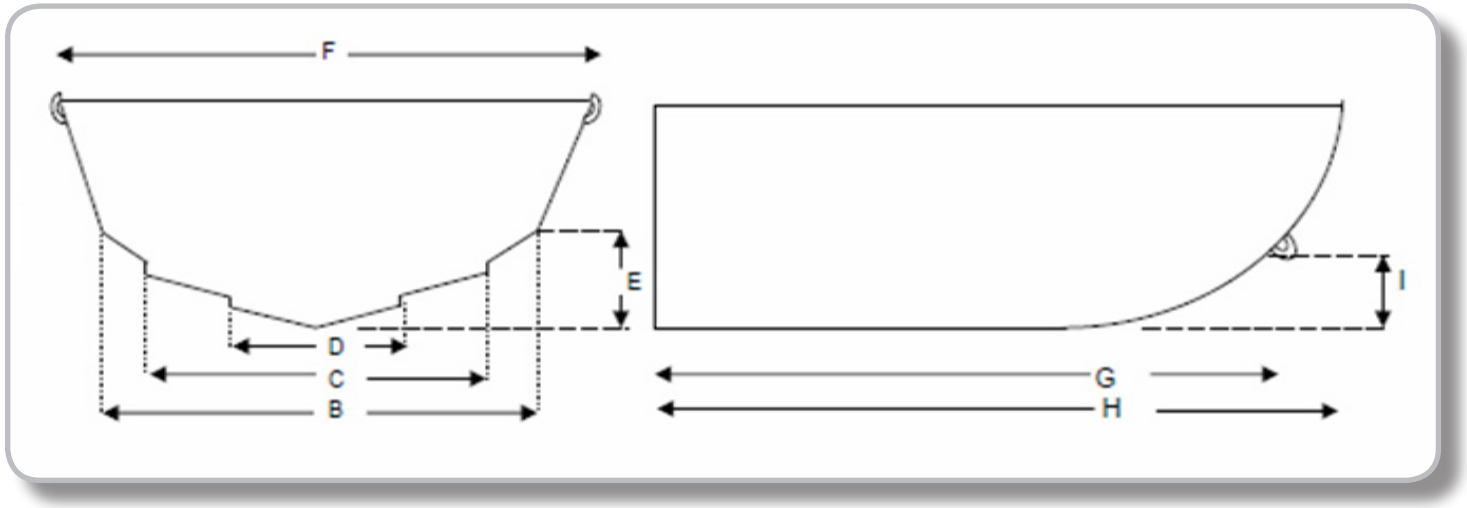
Yamaha

- Single Yamaha F200XB
- Single Yamaha F250XB
- Single Yamaha F250XCA
- Single Yamaha F300XCA

Mercury

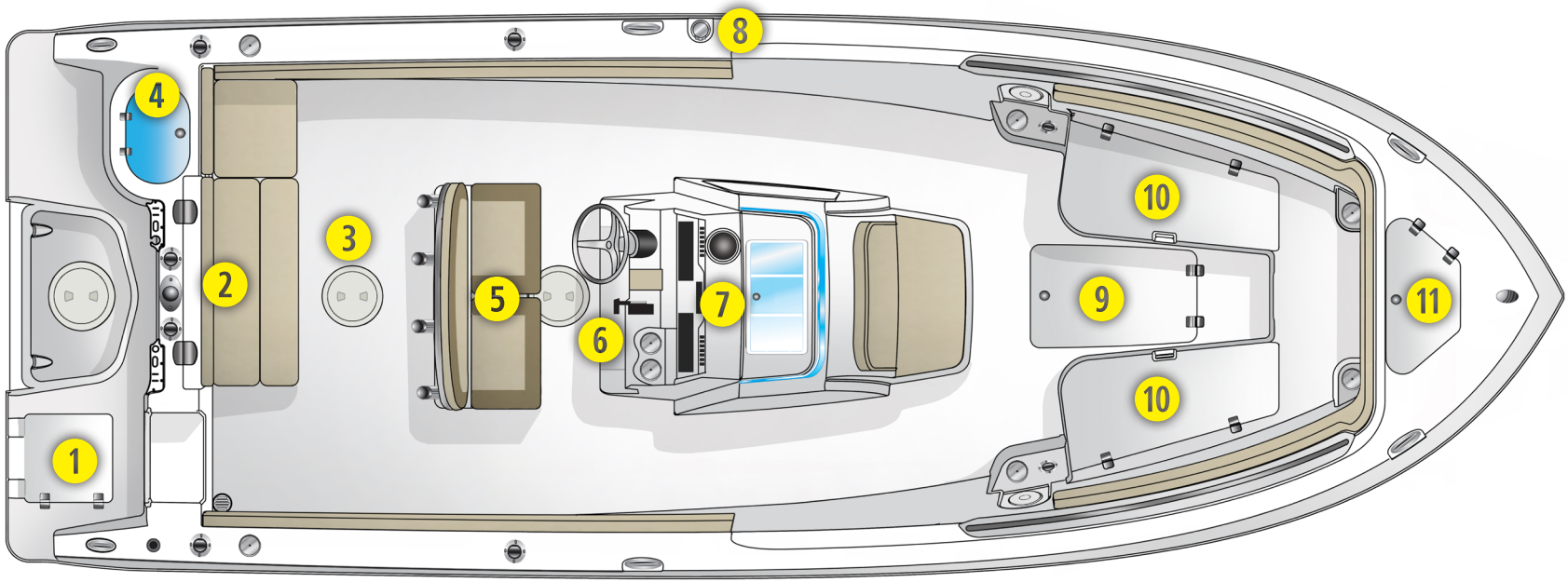
- Single Mercury 200XL Verado
- Single Mercury 250XL Verado
- Single Mercury 300XL Verado
- Single Mercury White Motor Upgrade (Only Available on 300 & 350)

Sailfish Boat Trailer Measurement Chart



Boat Models	B	C	D	E	F	G	H	I
208 CC	78 in.	53 in.	28 in.	11 in.	82 in.	218 in.	235 in.	27 in.
1900 BB	88 in.	66 in.	37 in.	10.5 in.	99.5 in.	198 in.	217 in.	24 in.
2100 BB	88 in.	66 in.	37 in.	10.5 in.	99.5 in.	220 in.	240 in.	24 in.
220 CC & WAC	87 in.	59 in.	31 in.	14.5 in.	102.5 in.	216.5 in.	243 in.	32 in.
236 CC & 242 CC & 245 DC	91 in.	57.5 in	30 in.	14 in.	103 in.	250 in.	273 in.	36 in.
240 CC & WAC	92 in.	59 in.	31 in.	15 in.	107 in.	241 in.	272 in.	30 in.
270 CC & WAC	94 in.	59 in.	31 in.	15 in.	107 in.	268 in.	302 in.	30 in.
275 DC	94 in.	59 in.	31 in.	15 in.	107 in.	268 in.	302 in.	30 in.
290 CC	94.5 in.	61 in.	32 in.	15.5 in.	107 in.	301 in.	336 in.	30 in.
320 CC & 320 EXPRESS	105 in.	65 in.	33 in.	16.5 in.	115 in.	315 in.	349 in.	38 in.
325 DC	105 in.	65 in.	33 in.	16.5 in.	115 in.	315 in.	349 in.	38 in.

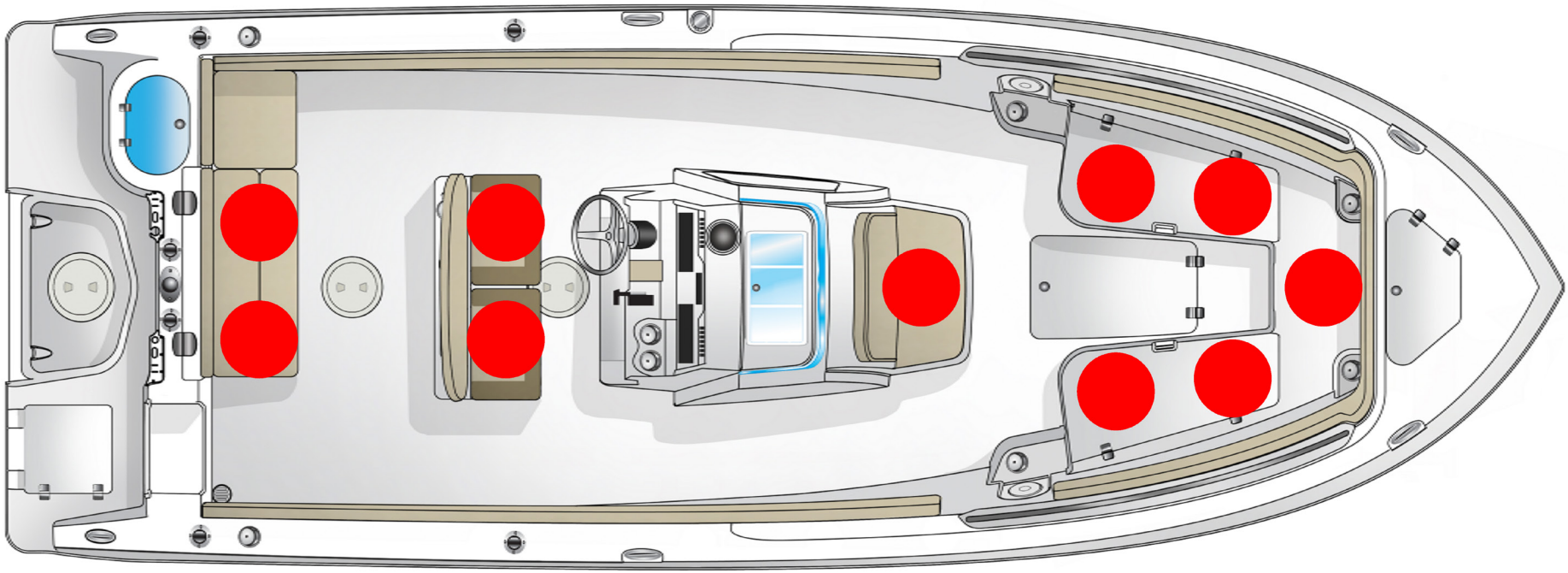
Sailfish 236 CC Boat Layout



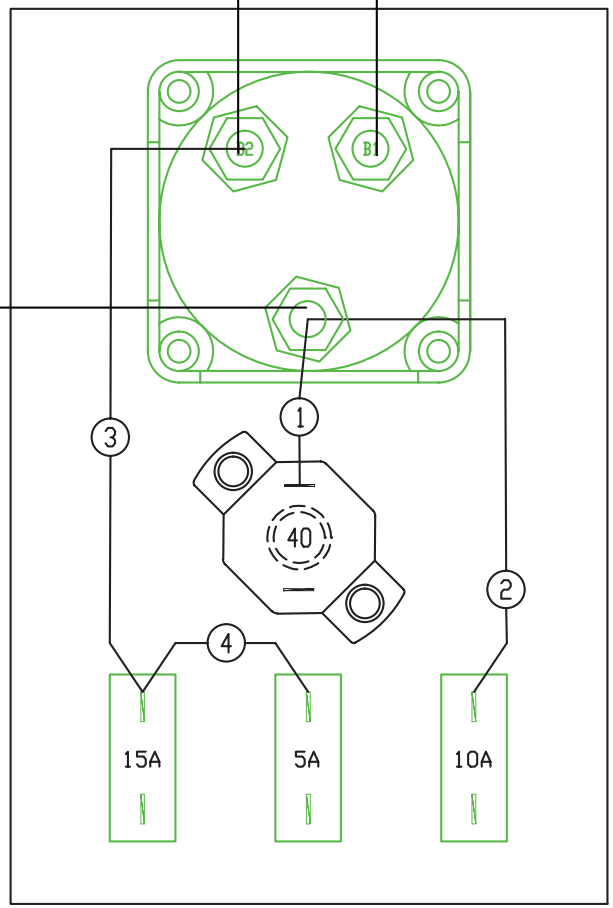
Key	Description
1	Boarding Ladder / Fresh Water Fill
2	Bilge Access
3	Fuel Sender and Pick-up Access
4	25 Gallon Livewell
5	Optional Leaning Post

Key	Description
6	Helm Area
7	Console and Head Area
8	Fuel FIll
9	In-Floor Storage
10	Insulated Fish Boxes w/ Overboard Drains
11	Anchor Locker

Sailfish 236 CC Seating Locations



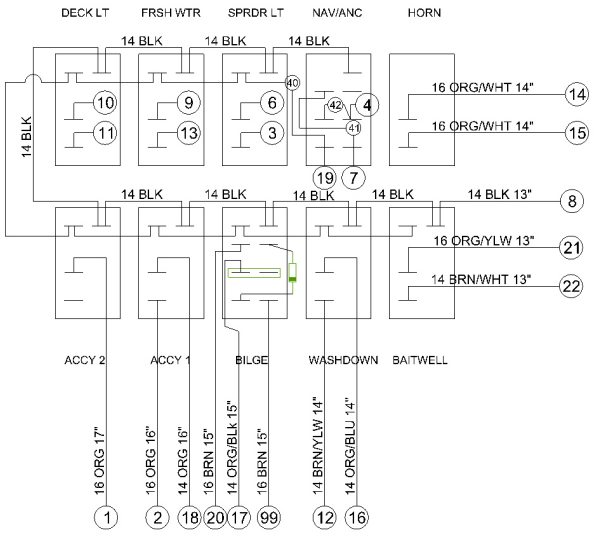
Battery Switch Wiring

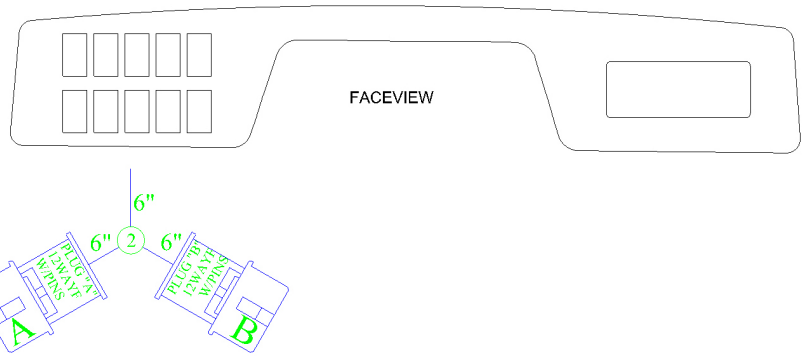


Battery 1

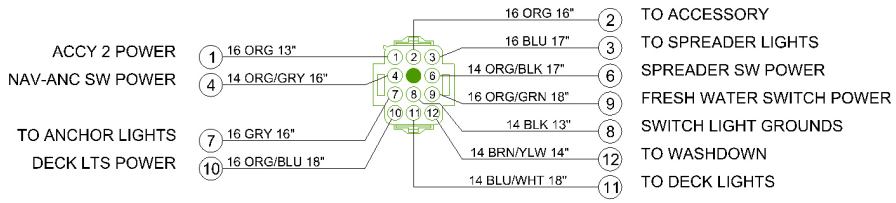
Battery 2

Switch Panel Schematic

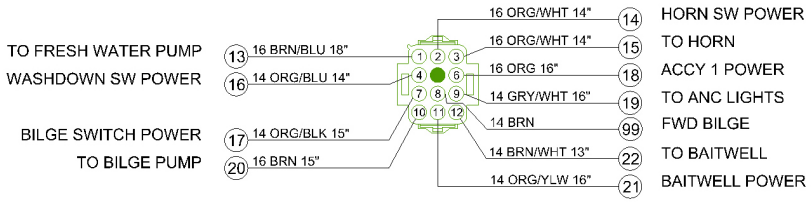




A
12 POS 15A MNLII
FEMALE CAP W/SM PINS
052-2035
(11) 052-3017 14-16GA

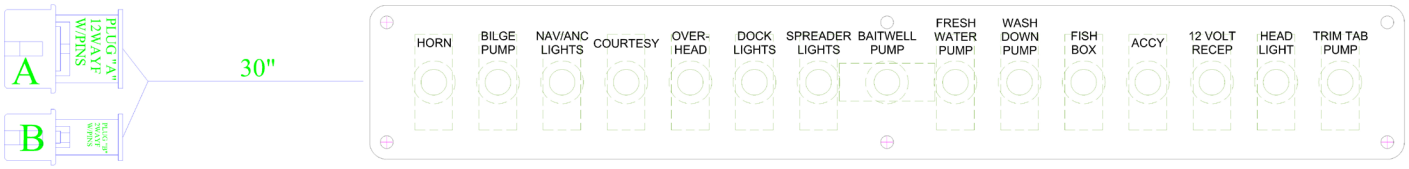


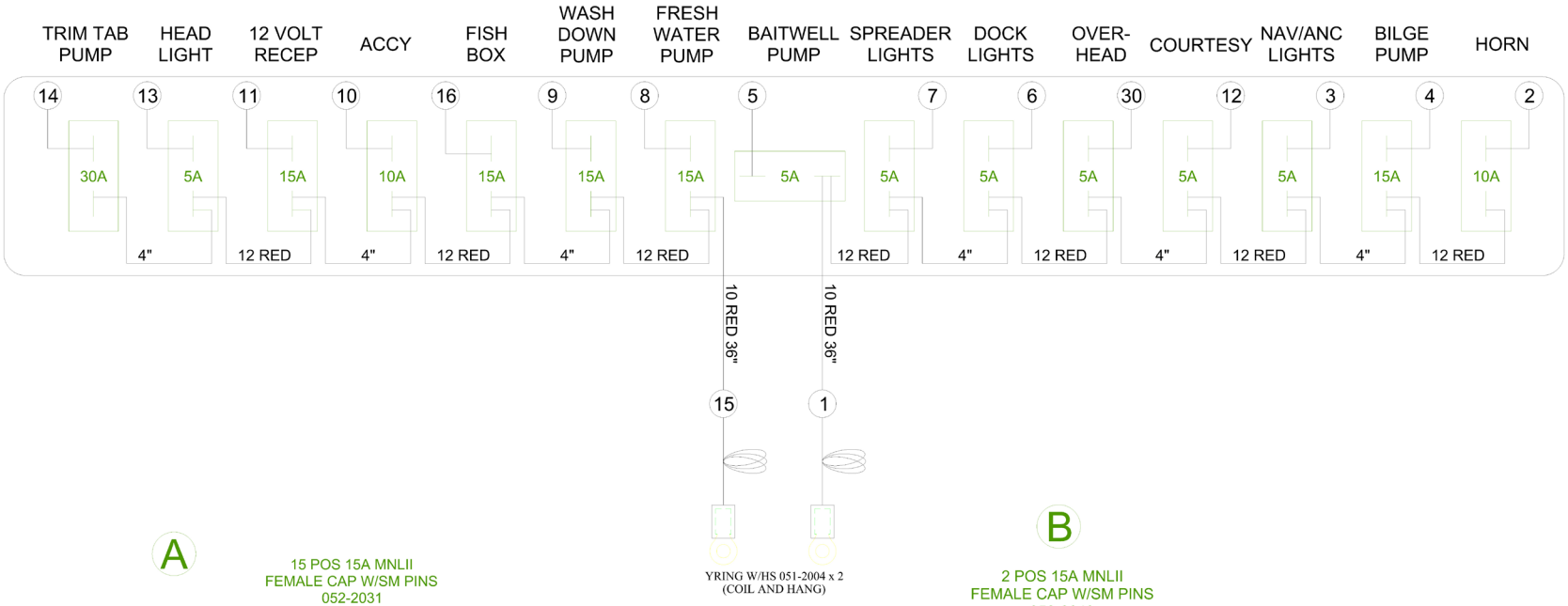
B
12 POS 15A MNLII
FEMALE CAP W/SM PINS
052-2035
(10) 052-3017 14-16GA



[Download High Resolution Diagram]

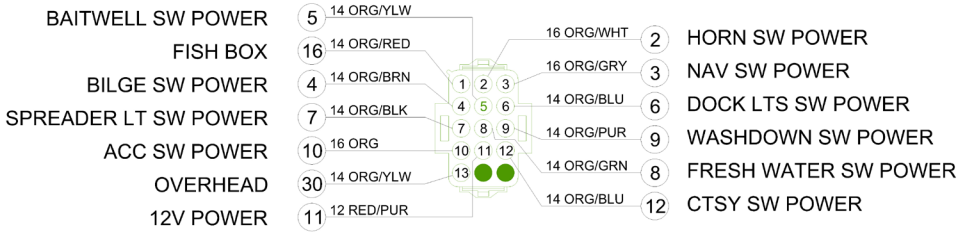
Breaker Panel Schematic





A

15 POS 15A MNLII
FEMALE CAP W/SM PINS
052-2031
(1) 052-3018 10-12GA
(12) 052-3017 14-16GA

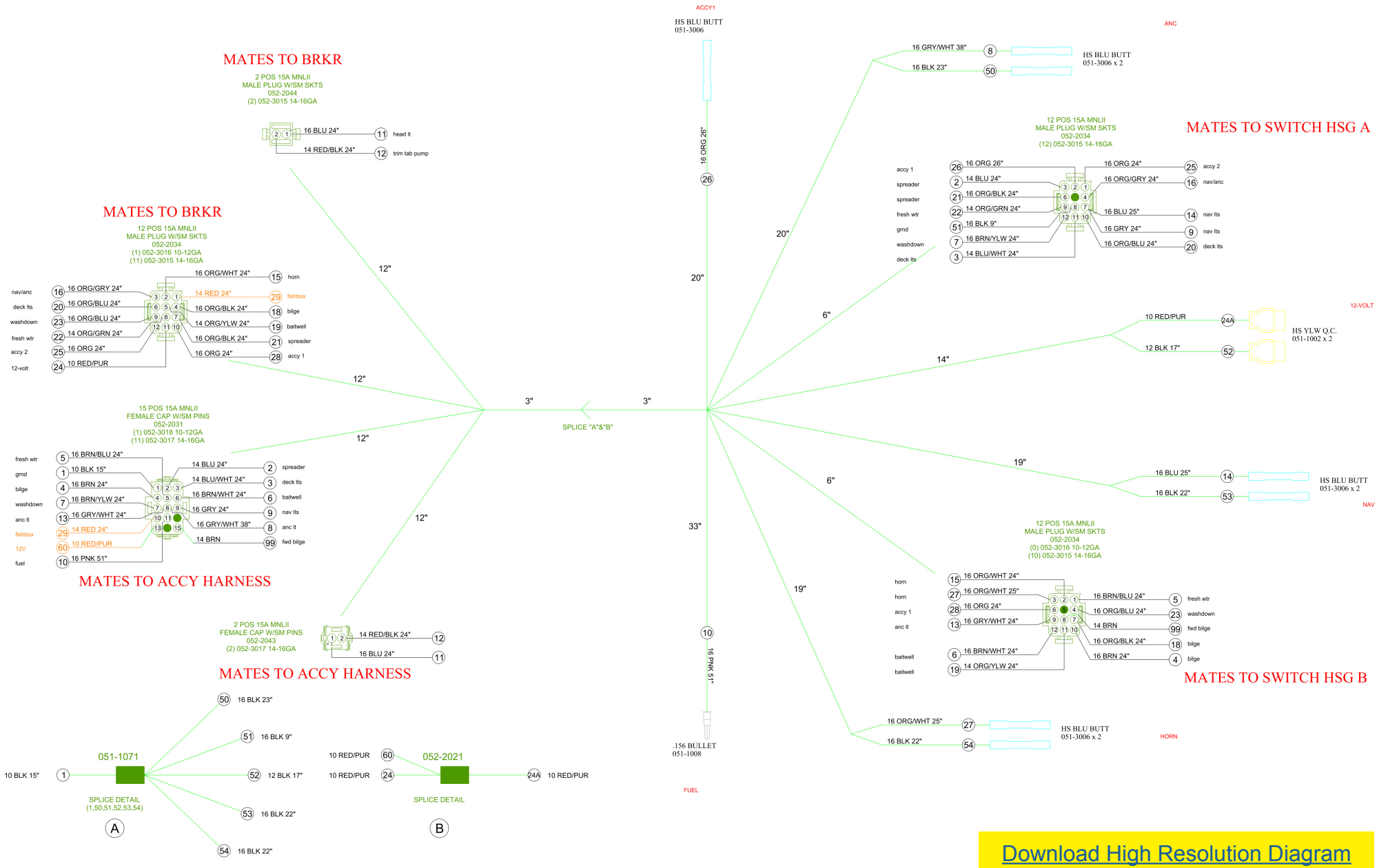


B

2 POS 15A MNLII
FEMALE CAP W/SM PINS
052-2043
(2) 052-3017 14-16GA

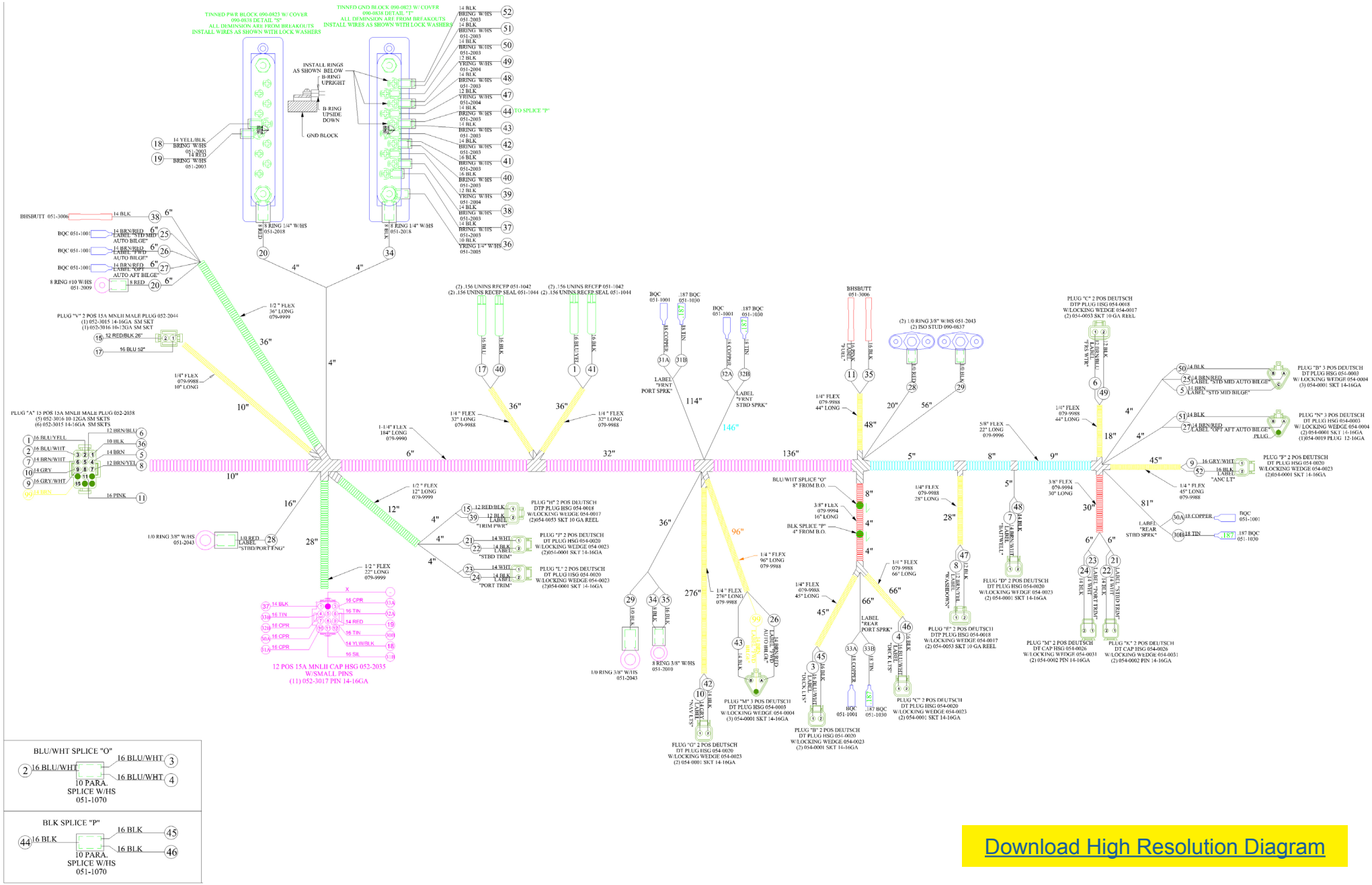
[Download High Resolution Diagram]

Adapter Harness



[Download High Resolution Diagram]

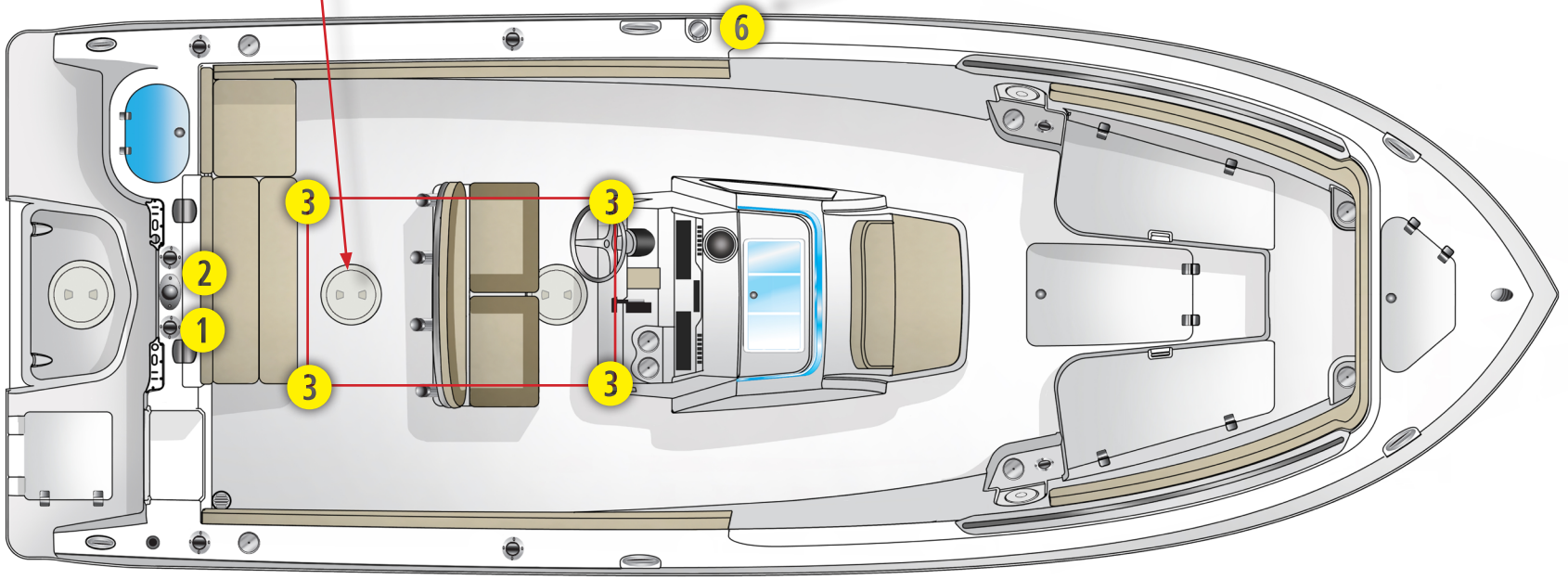
Distribution Harness



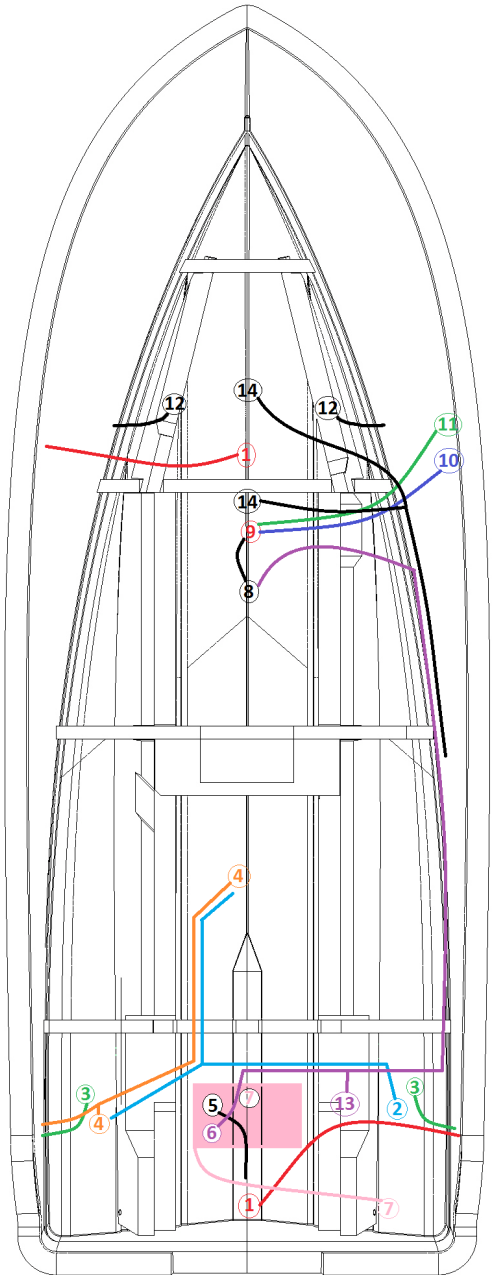
[Download High Resolution Diagram]

Fuel System Layout

Key	Description
1	Primer Bulb - N/A on Verado
2	Fuel Filter Access - Yamaha & Verado Only
3	Fuel Tank Location
4	Fuel Pickup
5	Fuel Sender
6	Fuel Fill



Plumbing Diagram - 236 CC



236 CC Sailfish

1. Bilge Pump
2. Livewell Fill Pump
3. Deck Drain
4. Livewell Drain
5. Transom Washdown Pump
6. Fresh Water Pump
7. Fresh Water Tank and Fill
8. Fresh Water Toilet (opt)
9. Waste Water Tank
10. Dockside Pump Out
11. Head Vent
12. Fish Box Drains
13. Fresh Water Transom Shower
14. Cooler and Floor Locker Drain

Helm Area

Key	Description
1	Compass
2	Switch Panel
3	Brand Specific Motor Guages
4	Optional Stereo
5	Trim Tab Switch w/ Indicators
6	Binnacle
7	Uflex Tilt Helm
8	Ignition Switch

UFLEX Steering System

UFLEX Steering System

UFLEX is the standard for steering systems in the marine industry because of the quality of their USA built products.

Every helm comes standard with a full stainless steel shaft; cylinders are built with carbon steel pistons, coupled with extra-large end caps to prevent leakage.

All of their connection materials are 304 stainless steel that has been electro-polished and passivated.

For more information on the service and maintenance of your UFLEX system please refer to your UFLEX owner's manual or view it electronically at http://uflexusa.ultraflexgroup.com/public/File/UFLEX2013_USA.pdf

Ignition Switch, Engine Shut-off Cord/Lanyard

Each Sailfish boat will be equipped with a Yamaha or Mercury ignition switch with an emergency engine shut off cord/lanyard.

This lanyard should be worn at all times while operating the vessel, if the vessel operator falls or moves a unsafe distance away from the helm controls the lanyard will pull out causing the engine to shut down.

Make sure the lanyard is not attached to a part of your clothing that could be easily torn free causing the switch not to pull. See your YAMAHA or MERCURY owner's manual for more information on this safety feature.

Engine Break-In Period

Each new outboard motor will need to go through a break in period to make sure all of the internal moving parts and components have a chance to correctly mate.

For more information on the break in period specific to your engine please refer to your YAMAHA or MERCURY Owner's manual.

Plug and Play Wiring

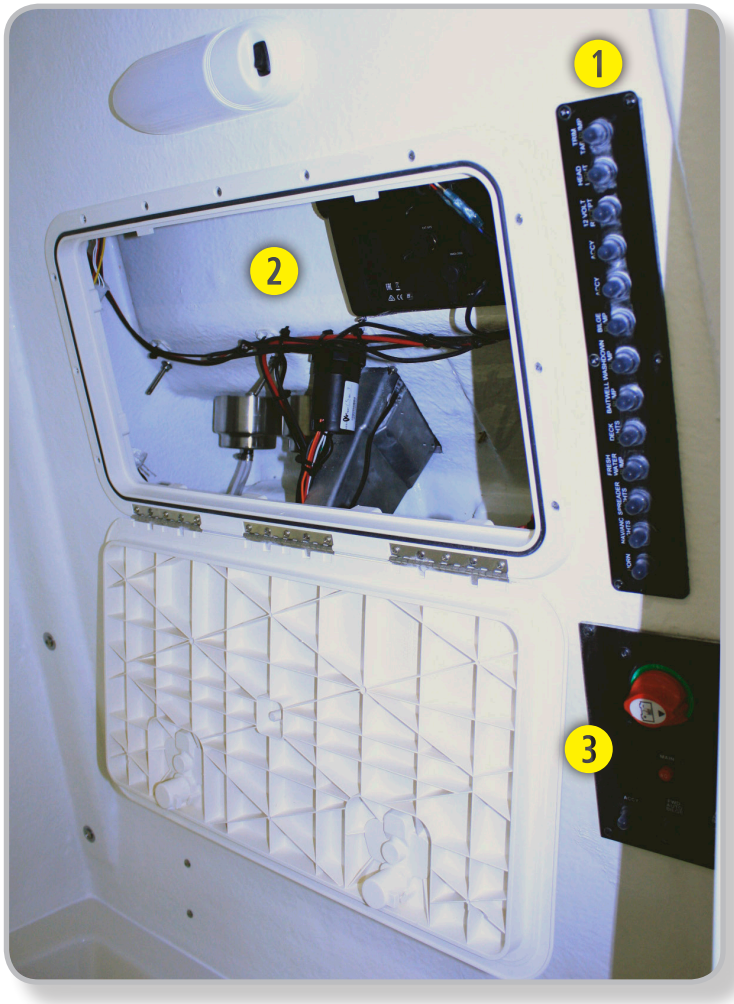
Deutsch Connectors are quick disconnect plugs used for durability and ease of replacing components in your Sailfish Boat.

These water resistant plugs are for use in electrical systems where moisture, salt spray, dirt and dust could affect the electrical connections or systems.

Fuel-Water Separator

Sailfish has rigged either Yamaha or Mercury, (Verado Only), water fuel separators in the bilge compartment. Each engine will have its own filter. These filters can be accessed through the bilge access doors, in the back of the boat. For more information on these filters, please review your Yamaha or Mercury Owner's Manuals.

Console/Head Area



Key	Description
1	Breaker Panel For Switches On Dash
2	Large Panel For Easy Access To Console Components
3	Battery Switch
4	Battery Access

Bilge Access and Explanation

The bilge of your boat can be accessed through the large door in the aft of the boat. This large door allows easy access too many of the boats components.

You may also access it through the access plate in the splash-well.

The bilge area of your sailfish boat should be checked before, during and after each operation.

Bilge Pumps

All Sailfish Boats are furnished with Rule Bilge Pumps, The Rule 2000 GPH (gallon per hour) pump has a built in automatic float switch. This is engaged when the water level rises in the bilge and the float rises in the pump causing the pump to turn on.

These pumps can be tested by turning them upside down, the pump should turn on, once turned back over it will run for a few more seconds and then shut off. The pumps also have a manual switch function on the main switch panel.

These pumps are wired into your boat bypassing the battery switch so that they have power at all times, this allows the automatic feature to work while you are away from the boat and the batteries are turned off.

Sailfish boats 236CC and larger are equipped with a forward bilge pump that is an electronic sensor pump. These pumps have a state of the art internal water sensor that detects water and automatically activates the pump when there is enough present to be pumped out.

These pumps can be tested by placing your finger over the “Test Area” on the back of the pump for 5 seconds, the pump will turn on to let you know it is functioning correctly. All wiring and switches to these pumps are the same as the Rule 2000GPH pumps.

Raw water Washdown system

The raw water wash down on your Sailfish Boat is powered by a Shur-flo Pro Blaster Pump which creates a pressurized system, once the pump is turned on and pressure is created the pump will shut down until more pressure is needed.

The raw water wash down pump can be accessed through the bilge access door in the aft of the boat. The raw water wash down system uses the same seacock as the livewell, it is accessed in the bilge area. To operate make sure the seacock is in the open position.

The hose fitting for the wash down is located in the transom splash well, to use simply attach a hose with a nozzle and turn the switch on. Pressure will build up in the hose and the nozzle and as you spray the pump will continue to engage as needed.

Key	Description
1	Raw Water Hose Fitting

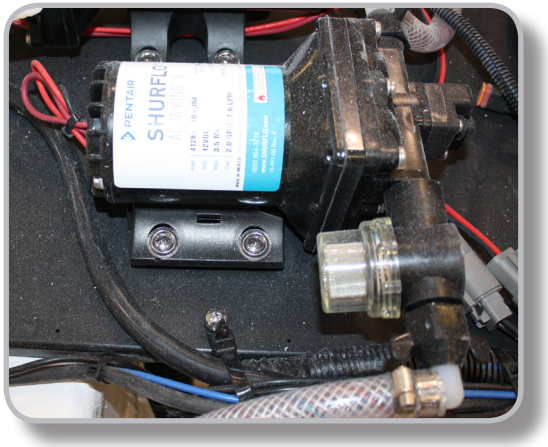
Freshwater Washdown and Shower System

The fresh water shower system on your Sailfish Boat is powered by a Shur-flo Pro Blaster Pump which creates a pressurized system.

When the pump is turned on pressure is created to the freshwater shower, once the system is pressurized the pump will shut down until more pressure is needed.

You should allow a few seconds for the system to prime and pressurize before attempting to use the transom shower. The freshwater holding tank is located behind the fuel tank in the bilge area. The fill for this tank is located under the boarding ladder on the port side of the vessel.

The freshwater pump can be accessed through the bilge access door in the aft of the vessel.



Key	Description
1	Fresh Water Fill

Livewell Operation

Instructions

- Make sure the seacock in the bilge area is in the open position.
- Turn on the livewell switch.
- Adjust the black aerator in the livewell to the desired flow (shown in CLOSED picture).
- In order to fill the livewell, place the white stand pipe with the strainer into the center drain hole.
- To drain the livewell remove the stand pipe and the water will flow out the drain hole.

Trim Tab Maintenance Tips

Cleaning

The attractive surface appearance of stainless steel cannot be regarded as completely maintenance-free. Our 304 Series Stainless Steel may in fact stain, discolor, or accumulate a layer of surface contamination (dirt and grime) during the normal course of the life cycle.

Minute particles of dust and rust may adhere to the stainless steel during shipping, installation or storage at OEM or retail locations.

Also, please remember that some types of stainless steel fasteners tend to “bleed” over the tabs and onto the boat. To achieve maximum corrosion resistance, the surface of the stainless steel must be kept clean and free of all these contaminants.

NOTE: LENCO RECOMMENDS AN ACID AND WATER SOLUTION TO CLEAN THE TRIM TAB BLADES. MARYKATE’S ON & OFF PRODUCT IS A GOOD CHOICE. RINSE THOR-OUGHLY UPON COMPLETION. BIODEGRADABLE, BUT PLEASE FOLLOW THE MANUFACTURER’S INSTRUCTIONS BEFORE APPLYING.

Sacrificial Anodes for your Lenco SS Trim Tabs

Be aware that stray currents in your marina or in a visiting marina can cause damage to your trim tab blades if not protected by sacrificial anodes.

- The addition of anodes on each tab will deter electrolysis.
- Do not paint under the anode or the anode itself.
- Check Anode condition frequently. Replace when necessary.

Visual inspection of system

- Periodically inspect all wires, mounting brackets, and hardware for damage.
- Make sure all mounting brackets are secure and working properly.
- Periodically test system for smooth operation.

Optional Lewmar V-700 Windlass

If your boat was has a factory installed windlass there will be a complete owners' manual in your owners packet. For more detailed information please refer to you windlass owners manual If you have a thru hull windlass system the remote will be stored forward in the windlass hatch.

Included on this page are some maintenance recommendations and a troubleshooting guide.

Maintenance

General Recommendations

- After the first two or three anchor recoveries, check the mounting nuts to ensure that the windlass is still fastened tightly to your deck, as it should now be bedded-in.
- Regularly wash down the exterior of your windlass with fresh water.
- Examine all electrical connections for possible corrosion, clean and lightly grease as necessary.
- Anchor rode splice should be checked regularly and remade if there is any evidence of wear.
- The Gypsy should be examined on a regular basis, because it is a high wear item. The Gypsy is designed for short scopes of chain and will last longer if properly used.

The windlass breaker is located in the head/ console compartment.

Troubleshooting

Anchor Rode pays out independently while windlass is not in use

This problem is a result of not securing the anchor rode combined with the Gypsy Drive Cap being slack. Tighten the Gypsy Drive Cap using the tool provided and always secure the anchor rode independently of the windlass whenever it is not being deployed or recovered.

Electrical Troubleshooting

As with most electrical marine equipment the majority of problems that arise are electrical in nature. Therefore it is essential that the proper voltage be maintained. The proper voltage on a 12 Volt system is 13.5 Volts. (Constant low voltage will destroy the motor). Ensure that electrical cable size is large enough to handle the current draw imposed upon it and keep the voltage drop within acceptable limits. In any circumstance voltage drop due entirely to cable resistance should not exceed 10%.

Follow the charts on the following page to troubleshoot the problem.

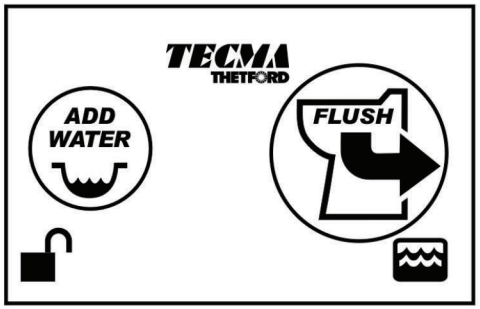
Lewmar V-700 Windlass Troubleshooting Chart

Failure to Operate Troubleshoot Chart: Reversing Toggle Control Switch (Part No. 0052519)	
Is there voltage at the input terminal (positive) to the control switch?	If no voltage is present, the battery isolation is OFF, the breaker is tripped or a fuse has blown. The battery may also have been dead or disconnected.
Yes ▼ No ▶	
Check voltage at the output terminals of the control switch with the switch on forward then reverse.	Control switch is defective.
Yes ▼ No ▶	
Replace Motor	
Sluggish Operation Troubleshoot Chart	
Is windlass overloaded?	Ease the load and ensure the battery is well charged.
Yes ▼ No ▶	
Check the voltage across the motor leads with the windlass on. (Proper voltage is 13.5V. Constant low voltage will destroy the motor). Is the voltage low? (Below 11.0V on a 12V system?	There is a severe voltage drop in the circuit. Check for undersized cables, poor connections or corroded connections. Also check for resistance across the battery isolation switch or solenoid. (Feel them to see if they are heating up).
Yes ▼ No ▶	
Is the voltage correct? (Above 11.0V and anchor is not fouled).	The motor is defective. Replace the motor.
Yes ▼ No ▶	

Optional Marine Head - Tecma Nano Premium Plus

Premium Plus Model

The premium plus has the ADD WATER and FLUSH buttons and the tank sensor indicator located below the FLUSH button.

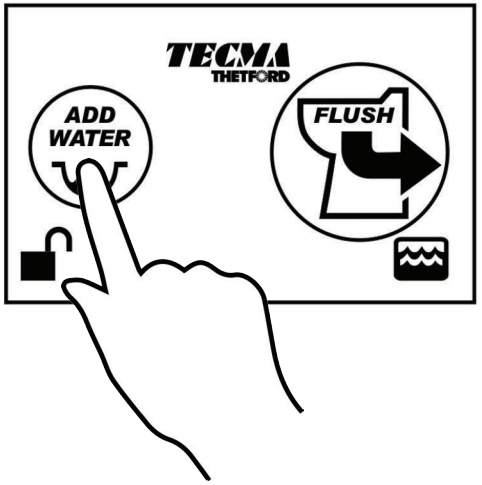


The toilet's wall switch control has two primary functions:

- An ADD WATER button - Adds approximately 0.5L of water each time it is pushed momentarily. Electronics prevent overfill.
- A FLUSH button - Starts an add water and macerate sequence that runs the motor and adds water twice for maximum cleansing and minimum water usage. Sequence ends with a small amount of water added to the bowl to provide an odor trap. Recommented to minimize water use and for liquid waste disposal without adding water.

Add Water

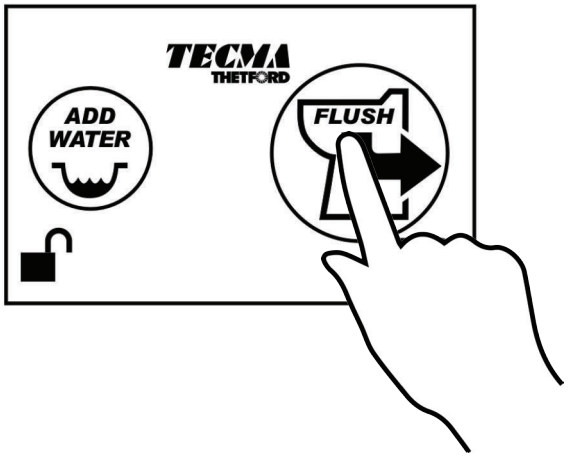
Recommended before flushing solid waste.



- Press and release (Approx. 1 sec.)
- Adds approx. 0.5L of water
- Can be repeated but only until max amount is reached

Flush

Recommended for flushing liquid waste (Minimize water usage).

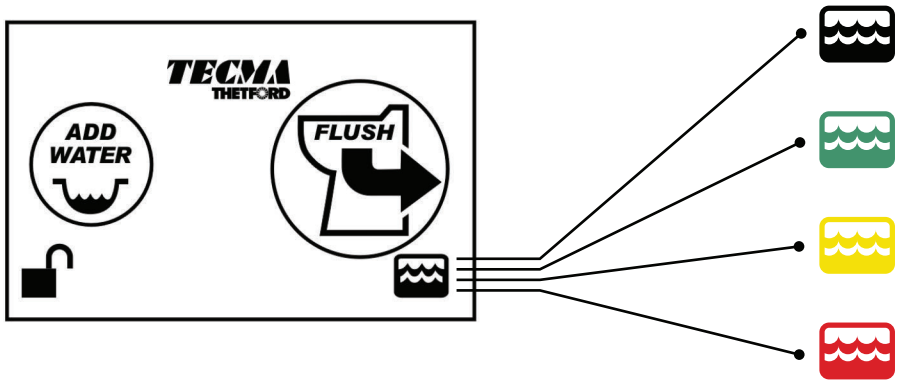


- Press and release (Approx. 1 sec.)
- Starts Flush Sequence
- Adds approx. .25L of water
- Macerates
- Adds .75L of water
- Refills Bowl

Optional Marine Head - Tecma Nano Premium Plus

Lighting

- Blue backlighting of the buttons provides identification at night. Buttons shut off to preserve power if not used for an extended interval.
- A red warning light in the lower left indicates full-tank lockout protection is disabled.
- The holding tank indicator in lower right is nornally green. It turns red to show the holding tank is full (or nearly full) and the flush lockout is activated.

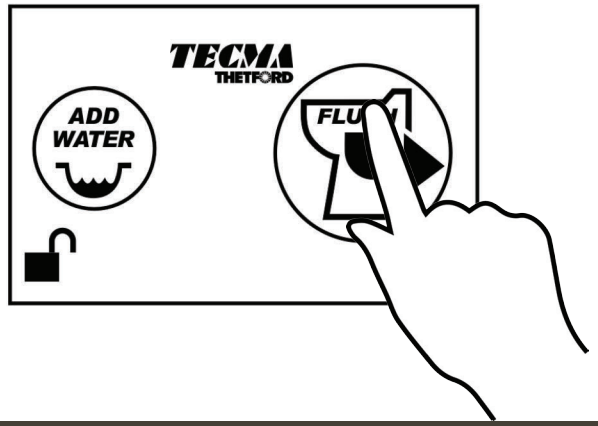


Flush Modes

- The toilet has two modes of operation: Marine and Residential. It is shipped in the Marine mode, which leaves the bowl with a minimal amount of water in the trap at the bottom of the bowl.
- The Residential mode leaves the bowl with a greater amount of water, similar to a home toilet. Modes can be changed by a user (See Diagram on next page).
- The toilet also has a Sleep mode to save power (See Diagram on right).

Sleep Mode

- Lighting Turns off after 8 hours of non-use.
- In Sleep Mode the switch LEDs will turn off until next use.
- Pushing either button will return lighting to full brightness.



Optional Marine Head - Tecma Nano Premium Plus

Enter Water Refill Programming Mode

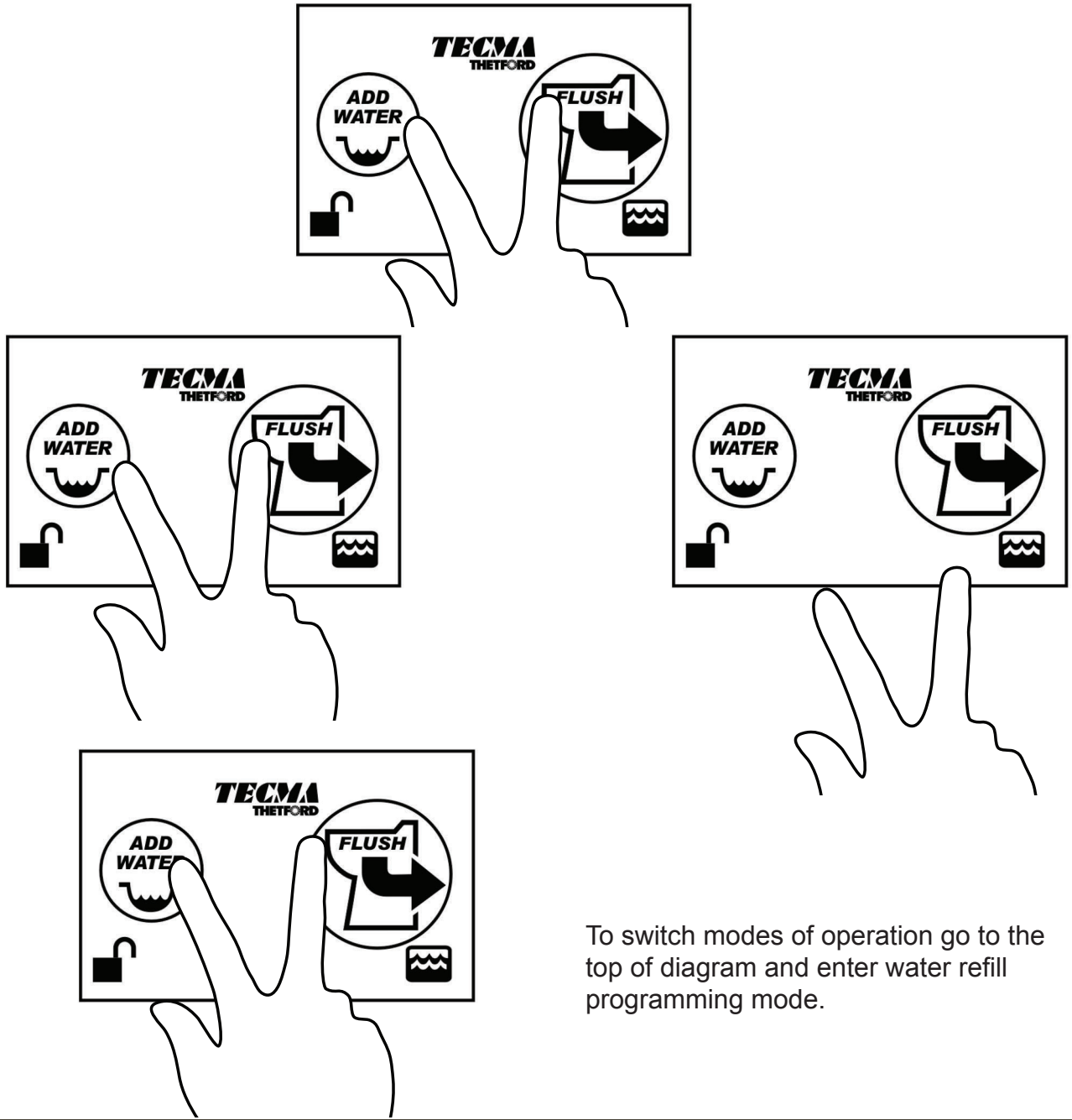
- Press and Hold both buttons for 3 seconds.
- LEDs will flash, programming mode will be entered.

Marine Mode

- Within 3 additional seconds of entering programming mode, remove both fingers.
- LEDs stop flashing
- Toilet will now refill only trap at the bottom of the bowl.

Residential Mode

- Continue to Press and hold both buttons, toilet will begin to add water.
- Release both buttons after 4 or 5 seconds (recommended to minimize water use.
- LEDs stop flashing
- This sets the amount of water that will be used in future flushes.

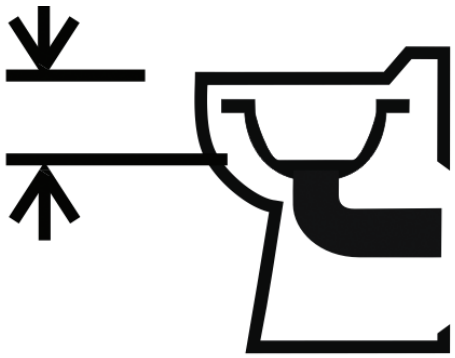


To switch modes of operation go to the top of diagram and enter water refill programming mode.

Optional Marine Head - Tecma Nano Premium Plus

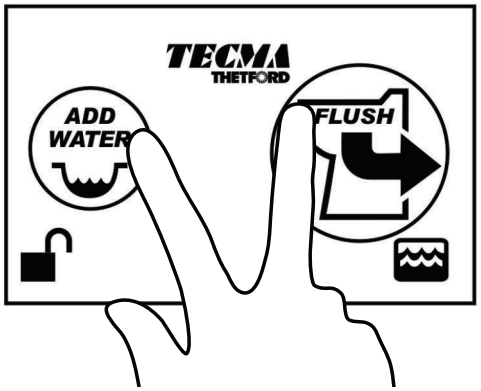
Correct Water Level Usage

- Water usage is not adjustable in the Marine Mode.
- The recommended water level is 5” below the toilet rim. To set this in the programming mode, release your fingers 4-5 seconds after water begins flowing into the toilet. Setting the water deeper than this level creates excessive water use and fills the holding tank too quickly.
- **CAUTION**: Raw Water systems are designed to perform optimally with pumps rated at approximately 3.0 gallons per minute (similar to the pump supplied). Lower rated pumps will provide a less vigorous flush, while use of higher rated pumps will cause excessive water consumption.



Emptying the Bowl

- To empty bowl without adding water or starting a flush sequence, push and hold both buttons simultaneously until bowl contents are discharged. Pushing either button returns toilet to normal operation.



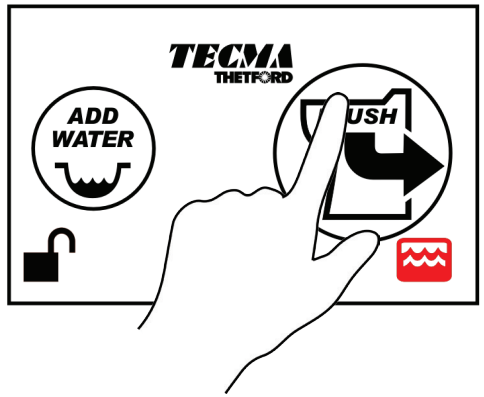
- **NOTE**: Holding more than 5 seconds will start the water level programming mode.
- **CAUTION**: Refill the toilet as soon as possible after emptying the bowl. Leaving water out of the trap can result in objectionable odors.

Flush Lockout

- This toilet is equipped with an electronic holding tank level sensing feature that automatically prevents FLUSH button operation when the holding tank is full and thus, prevents waste overflow.

Single Flush Override of Flush Lockout

- If holding tank is full, system will not allow a flush to occur. (If a flush is taking place, it will be completed.) Toilet will NOT flush automatically when the tank level indicator is red.



- This can be overridden by holding the FLUSH button for about 8 seconds. This initiates one flush and reacti-vates flush lockout.
- This override function is intended for emergency use only. Because the sensor is not located at the exact top of a tank, the override function can be used about 5 times before overflow-ing. Size and shape of the holding tank determine the actual number of times it can be used. Contact manu-facturer for more detailed information.
- WARNING: An excess of flushes after

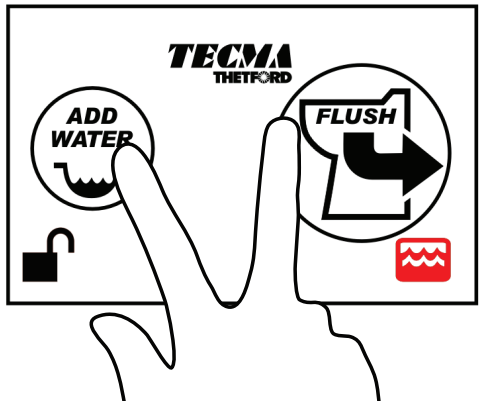
flush lockout is disabled can cause waste to overflow tank through plumbing. Tecma accepts no responsibility or liability for damage to equipment, or injury or death for overflow of wast holding tank when full-tank lockout is overridden. Waste holding tank should be checked after using Nano in override mode.

Disabling / Re-Enabling Lockout Protection

- Flush Lockout normally occurs when the holding tank becomes almost full. When this occurs, pushing the flush button causes tank symbol to flash, but does not cause a flush.
- **CAUTION**: Disabling the Toilet Lockout Function can cause overflowing of the waste tank. Emergency Use Only!

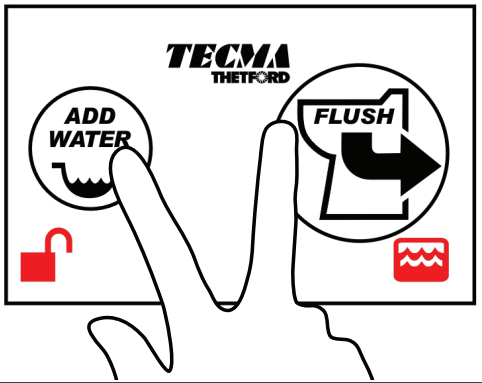
ENABLING LOCKOUT

- Press both buttons twice.
- Unlock symbol Light Turns off.
- Lockout is enabled.



DISABLING LOCKOUT

- Press both buttons twice .5<, <1.0 seconds 2 times.
- Unlock symbol light turns on
- Lockout is disabled.
- **NOTE**: This red symbol will remain on as long as lockout is disabled, even if the holding tank is emptied.



Maintenance

CLEANING

Use Thetford's Aqua-Clean, a non-abrasive, all-purpose cleaner, on the bowl and macerator pump. It is specially formulated and thoroughly tested to be safe for all components of your toilet system. It safely removes iron stains and hard water deposits and can be safely used on many other surfaces, including countertops, sinks, showers and tubs. Just squeeze Aqua-Clean onto surface. Allow to sit a few minutes and clean with a sponge. For severely soiled toilets, allow Aqua-Clean to soak overnight.

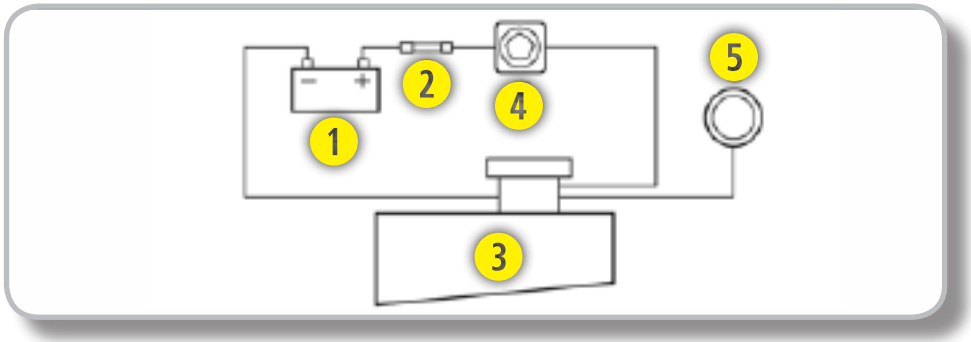
Never use household cleaners, which can contain bleach, in the toilet system. Household toilet bowl cleaners contain harsh acids. Bleach, petroleum-based products, strong acids and abrasives can cause irreversible damage to the toilet system and components.

WINTERIZING

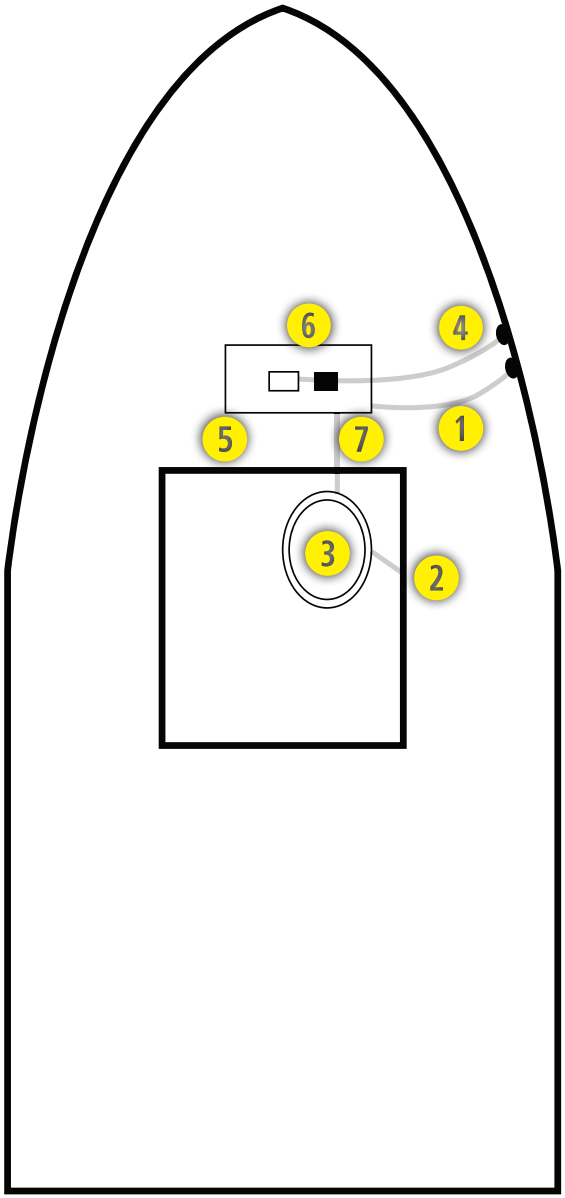
Use only propylene glycol based, non-toxic antifreeze when storing toilet during freezing conditions. Never use automotive antifreeze or windshield washer solvent to winterize. Make sure that both the entire supply and discharge systems are thoroughly winterized to ensure complete protection for your system.

Optional Marine Head with Waste Tank

Type III MSD Waste Management System



Key	Description
1	Battery
2	Fuse
3	Waste Management System
4	Master Switch
5	Controller for Waste Management System



Key	Description
1	Vent
2	Inlet
3	Toilet
4	Deck Pump Out
5	Overboard Discharge
6	Waste Holding Tank
7	Outlet

Optional Marine Head - Tecma Nano Premium Plus

STORAGE
When storing the system for more than two weeks, thoroughly clean toilet and hoses by flushing with Thetford's Aqua-Kem, EcoSmart or Aqua-Clean.

SEASONAL START-UP
Test toilet before using by flushing the toilet to check operation. Verify that there are no leaks.

TISSUE
To facilitate flushing, it is recommended that you only use toilet tissues specifically designed to desintegrate rapidly (unlike household tissues), such as Thetford's Aqua-Soft (2-ply) and RV/Marine Toilet Tissue (1-ply).

TROUBLESHOOTING

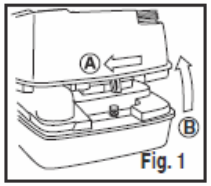
PROBLEM	CAUSE	ACTION/SOLUTION
Toilet does not flush or flush performance is poor	Waste tank is full	Empty waste tank before continuing to use toilet.
	Clog at pump inlet	Clear clog. DO NOT flush foreign objects.
	Solid object in macerator	DISABLE power. Attempt to remove object. If unsuccessful, contact Tecma Service (+39 0744 709071). DO NOT flush foreign objects.
	Low voltage	Check that toilet supply voltage is 12V+/-2V (24V+/-2V) AND that there is no more than a 10% decrease in voltage when macerator is running. If voltage decreases more than this, there may be a wiring problem in the boat.
Water does not enter bowl during flush or water add cycle	Water supply line kinked or not connected	Check that supply line is properly connected to fresh water supply. Check for kinks in the supply line.
	No power to water pump	Check that fuse/circuit breaker has not tripped. Ensure all electrical connectors to water pump are fully mated.
	Water supply has been turned off	Open water supply valves or reconnect power to supply pump.
	Solenoid not plugged into relay module (where applicable)	Ensure wiring harness to solenoid is fully connected.
Water continues dripping briefly into bowl after flush cycle is complete	Toilet is installed below water line with vented loop in water supply line	Normal operation – if only a small amount of water drips from nozzle.
Bowl drains dry after flush	Water is siphoning out of bowl due to discharge hose pulled down	Discharge hose (E) from macerator pump is pulled down. Straighten hose so that top of discharge hose is in line with toilet nozzle.

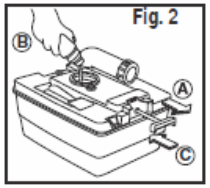
Optional Porta Potti

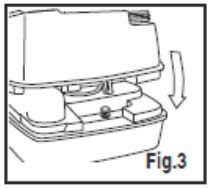
Prepare Unit

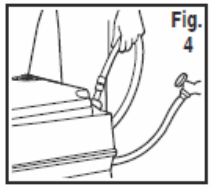
- Separate tanks (Fig. 1A & 1B).
- Add Deodorant (Fig. 2A & 2B) and 4-oz of water.
- Close valve (Fig. 2C).
- Recombine Tanks (Fig. 3)
- Fill upper tank with fresh water (Fig.4). Replace cap and tighten securely.

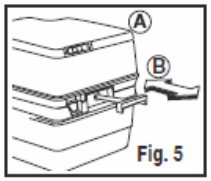
NEVER add deodorant to fresh water tank.

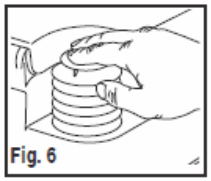


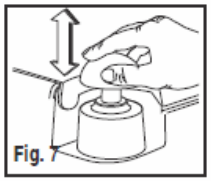


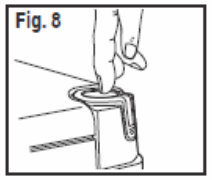












Before Use

Vent any built-up heat or altitude pressure and prevent splashing: close cover (Fig. 5A), and open and close holding tank valve (Fig. 5B).

To Flush

- Open Valve (Fig. 2A).
- Bellows: Fig. 6.
- Piston Pump: Fig. 7.
- Electric Flush: Fig. 8 For best rinse and efficient water use, press button quickly several times.
- Close valve completely for odor-tight seal (Fig. 2C).

Deodorizing

Recommended holding tank deodorant for best performance:

Thetford SupremeGreen
Thetford Aqua-Kem
Thetford Campa-Chem

Care

Recommended cleaner:
Thetford Aqua-Clean

NEVER use scouring powders, acids or concentrated cleaners, which can damage plastic parts and rubber seals.

Service & Parts

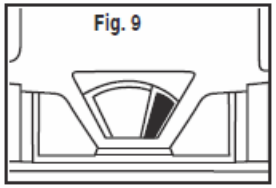
For parts and/or service, contact your RV Dealer.

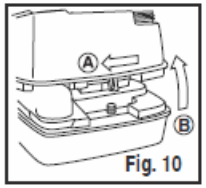
For warranty issues or more information, call Thetford's Customer Relations Department:
1-800-521-3032.

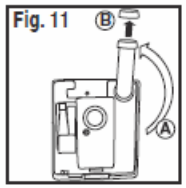
Optional Porta Potti

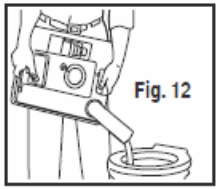
Emptying Waste Tank

1. DO NOT OVERFILL TANK. Empty when waste level indicator turns from green to red (Fig. 9). (Toilet without an indicator: open valve to check visually).
2. Be sure valve handle is closed. Separate tanks (Fig. 10).
3. Carry waste tank to a permanent toilet.
4. Remove Pour-Out Spout Cap while it is pointing upward (Fig. 11).
5. Press Air relief valve to prevent splashing (Fig. 12).
6. Rinse, recharge and reassemble unit.









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Care

Recommended cleaner:
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NEVER use scouring powders, acids or concentrated cleaners, which can damage plastic parts and rubber seals.

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Caring for Aluminum - Cosmetic Corrosion (Pitting)

The information provided is designed to give you a thorough understanding of the factors that can impact the appearance of your anodized aluminum. By using this information, we hope to help you enhance the beauty and value of our products.

What Causes It?

Corrosion is a natural phenomenon that affects metals by either a chemical or electrochemical reaction. The rate at which aluminum corrodes depends greatly on the environmental conditions and the amount of preventative maintenance performed. Our goal is to slow down or stop this natural phenomenon we call pitting (or corrosion).

Anodized Aluminum

The aluminum on your boat has been anodized. This creates a very hard protective seal on the surface of the aluminum to protect it as much as possible from pitting. When the anodized coating is broken and raw aluminum is exposed, corrosion will take place. Damage from other abrasive impacts can break the anodized coating.

Chemical Attack

Corrosive chemicals containing high concentrations of acids or alkalis will remove the anodized coating. Solutions containing chlorine, salts, or ammonia are all harmful to the anodized aluminum on your boat. Many common household cleaners contain chemicals that will remove the anodizing and cause pitting.

Avoidable	Unavoidable
Strong acidic solutions found in cleaners, paint remover, degreasers, etc.	Airborne pollution. Airborne particles from local sources: vehicles, incinerators, paper mills, chemical plants, power plants, etc.
Concentrated alkaline based solutions. Many concentrated soaps fall into this category.	Harsh chemicals from work performed at local shipyards and dry docks.
Chlorine, sulfurs, solvents and ammonia based products.	Be aware of local sources that can expose your new boat to corrosive chemicals.

Caring for Aluminum

Tips

Avoid the use of bleach or chlorides to clean the aluminum or nearby components. Chlorides can leach onto the aluminum when used nearby.

Avoid abrasive cleaning products. Never use steel or brass wool, wire brushes, polishing wheels, rubbing or polishing compounds. These items will remove the anodizing and lead to pitting.

Protective Products

There are many different products available to protect aluminum. Some are designed to seal and protect before problems occur and others are designed to use after pitting has appeared.

While these products are effective, they are not one time solutions. Metal protectors must be reapplied on a regular basis. How often a protector should be used varies according to the protector you choose, the types of exposure your boat is subjected to, and how often you use and wash your boat. Follow the application guidelines provided with the protector you choose.

Harmful Cleaners

Bleach (Chlorox, etc.)
Mild abrasive cleaners (Ajax, Comet, Soft Scrub, Rubbing Compounds, etc.)
Strong cleaners (409, Engine Degreasers, Bilge Cleaners, Teak Cleaners, Bottom Cleaners, etc.)

Below are some metal protection products that are readily available at marine retailers.	
Woody Wax CPR	Woody Wax woody-wax.com 800-619-4363
Boeshield T-9	PMS Products, Inc. boeshield.com 800-962-1732
Premier Polish	Aquatech aquatech-marine.com 800-853-7760
Corrosion Block	Lear Chemical learchem.com 800-256-2548

Caring for Stainless Steel

The information provided is designed to give you a thorough understanding of the factors that can impact the appearance of your anodized aluminum. By using this information, we hope to help you enhance the beauty and value to our products.

What Makes Stainless Steel Stainless?

Oxygen is the key element in causing rust, or red oxide on steel and other metals. Stainless Steel contains Chromium which reacts with the oxygen in the air to form a chrome-oxide surface layer that is invisible to the eye, but strong enough to prevent further oxygen from “staining” (rusting) the surface. Higher levels of Chromium and the addition of other alloying elements such as nickel and molybdenum enhance this surface layer and improve the corrosion resistance of the stainless material.

What Determines Different Grades of Stainless Steel?

The grade of Stainless Steel is primarily determined by the amount of the Chromium and Nickel alloys contained in the material. 304 and 316 are the prominent grades of Stainless Steel: 304 contains 1% Chromium and 8% Nickel, while 316 Contains 16% Chromium and 10% Nickel and 2% Molybdenum. The Molybdenum is added to help resist corrosion to chlorides (like sea water and de-icing salts).

Can Stainless Steel rust?

Not in the way steel rusts. Steel will discolor, bubble and flake from red oxide development. Stainless Steel may develop red spots, but this is usually due to Iron particles on the surface of the Stainless Steel. Any Iron particles must be removed and the Stainless Steel cleaned with a high concentration of citric acid or a commercial cleaner specifically designed for Stainless Steel.

Is Stainless Steel Green (Environmentally Friendly)?

Stainless Steel is highly sought after by recyclers and is 100% recyclable. New Stainless Steel typically has a recycled content of between 65% & 80% which makes it one of the highest average content recycled construction materials on the planet.

Will Stainless Steel Discolor?

Cleaners that are typically used with cement, grout and stone, etc., may contain Muriatic Acid. Stainless Steel is not resistant to Muratic Acid. MURIATIC ACID SHOULD NOT BE USED IF STAINLESS STEEL IS PRESENT. It is not even necessary that the acid touch the Stainless Steel, just the “fumes” from it will cause a discoloration of the Stainless Steel. Other than this, Stainless Steel is usually very resistant to discoloring.

Care Instructions

Regular cleaning with fresh water and a soft cloth will keep and protect your windshield, window, or hatch for years.

GLASS

Use commercially available glass cleaners or a mixture of fresh water and vinegar. Do not use abrasives, harsh chemicals, or metal scrapers. Regular cleaning will help assure clarity of the glass for safe boating.

PLASTIC TYPE WINDSHIELDS

Never use glass cleaning solutions or dry cloth to clean Plexiglas. Never use acetone, benzene, carbon tetrachloride, or lacquer thinner. The only acceptable cleaners are a small amount of denatured alcohol, clean water, or a commercially available plastic polisher specific for the purpose. Use a soft rag and wash off the plastic windshield first with lukewarm water to avoid scratching the surface.

WINDOW CHANNELS

Clean window channels with mild detergent only. Channels can be sprayed with silicon aerosol while sliding the glass back and forth.

STAINLESS STEEL

Polish with commercially available metal polishes. A boat or car wax periodically applied will offer extra protection against the elements.

PAINTED SURFACES

Clean with fresh water periodically. Touch up scratches and areas where paint has chipped off with touch-up spray paint. Touch up kits are available from the factory. Boat top clips – never slide along windshield framework.

To change clip location, snap on and off the aluminum top track.

SIDE WING VENT ADJUSTERS

Use care when opening and closing vent. Do not force.

Never ground windshield with any electrical devices or appliances.

Never use the windshield as a mooring cleat for tying off to a dock, pier or another boat. Never use the windshield as a tie-off attachment for trailering purposes.

Gel Coat

Your Boat's Gel Coat Finish

Congratulations! You are the proud owner of a new power or sail boat. You are also the owner of a new Integrity® gel coat finish on the hull and/or topside, and we would like you to be as proud of it as we are. That beautiful, shiny new color you love is the result of many years of gel coat research, testing and development.

But as proud as we are of the gel coat, no finish is totally impervious to chemicals and weathering. Imagine what a brand new car could look like if allowed to sit at a marina for years with no cover and no washing or waxing. With the same minimum maintenance you would ordinarily give your new automobile's finish, your boat's gel coat finish will retain its depth of color and gloss for years.

Overall Maintenance

Normal maintenance of your gel coated fiberglass boat is similar to the care you would give your automobile. Overall, automotive cleaners and waxes work fine, as well as the marine cleaners and waxes.

Note: Do not use caustic or highly alkaline (high pH) cleaners or those containing ammonia. These type of cleaners may darken white or off-white weathered gel coat surfaces. A chemical reaction producing staining occurs if these type of cleaners are used on weathered gel coat. However, the stain may be removed with a rubbing compound or by lightly sanding with 400 grit sandpaper followed by an application of rubbing compound and a thorough waxing.

Cleaning

We recommend general washing to avoid soil build-up and staining. The soil to your gel coat is the result of regular use and environmental pollutants such as soot and smog. Periodic cleaning with a mild detergent is necessary to remove normal deposits of soil.

Waxing

From constant exposure over time to our natural environment and undesired pollutants, the gel coat begins to lose its gloss. To restore your finish to the original gloss and color requires your special attention. After washing with a mild soap or detergent, give the surface a good polishing with a self-cleaning marine or automotive wax. Waxing in the fall and spring is generally recommended to maintain and restore most of the original gloss. If the surface has not been maintained and has weathered badly, and if cleaning and waxing does not restore the finish satisfactorily, compounding will be required.

Compounding

Please see your marine dealer for advice. Polishing and compound (fine abrasive) or rubbing compound (coarser abrasive) is recommended for use on fiberglass boats to remove scratches, stains, or a severely weathered surface. Polishing or rubbing compound can be applied by hand or by pneumatic buffer. After the scratched, stained or weathered surface has been moved, it should be waxed to enhance the gloss and color while providing a seal to retard staining or new soil accumulation.

Discoloration Removal

Your marine dealer is best equipped and trained to do this work. If regular washing and waxing has been neglected, discoloration of the gel coated fiberglass surface may occur.

Gel Coat

Discolored areas are very shallow in depth, literally right on the surface. The discoloration may be removed by gently wet-sanding the affected areas only by using 600 grit, wet or dry specially treated waterproof sandpaper. It's important to always sand in one direction, this includes the curves too. Use plenty of water to cool and clean the sandpaper and cut back on dust. After you are finished sanding, dry the areas and verify all the discoloration has been removed. If not, repeat the process.

After all the discoloration has been removed, the area will need to be buffed. Using an electrical or pneumatic buffer, buff at low speed (1750 rpm – 2250 rpm), this will restore the luster to the sanded surface. Using a generous amount of rubbing compound, apply it in a circular motion with a soft wool pad. When buffing has been completed, wash off the rubbing compound with clean water, and dry the surface.

To restore the gloss to the affected area, use a high-grade marine or automotive wax.

Repairs

During the life of your boat, some damage to the gel coat surface is unavoidable. We recommend repairs done by trained, experienced professionals at your local marine dealer.

Scratches

If the scratch is in the gel coat surface, not penetrating the fiberglass, use an automotive polishing compound and rub it out. Apply the compound by hand using a damp rag or by using a power buffer. The scratch may not entirely disappear, but it should be noticeably better.

Gouges and Chips

Our recommended patching procedure is to first clean the area needing repair with an acetone solvent to remove all traces of wax and oil. Next, thoroughly mix one tablespoon of "Patch Paste" with two or three drops of catalyst on a scrap piece of cardboard.

Apply the mixture to the pit, chip or gouge with a single-edge razor blade, matching the surface and contour of the area being repaired. Apply slightly more mixture to avoid having to fill the damaged section a second time. Allow the patch to harden thoroughly for a minimum of two to three hours.

Using a fine grit "wet or dry" sandpaper on a sanding block, wet-sand the patch until it is level with the surrounding surface. Finish with a marine or automotive rubbing compound using the same approach as used for the scratches.

Refinishing

For a severely scratched or weathered fiberglass boat that is no longer restorable by using the previous methods, it may then be necessary to refinish it with two-package or two-part aliphatic urethane enamel. This can be done very effectively, but it is recommended refinishing should only be done by experienced professionals.