

203DFS

Quick Guide & Schematics



KEY WEST BOATS

Welcome to the Key West Family!

Dear New Boat Owner,

On behalf of every employee at Key West Boats, we are pleased to welcome you to the Key West Family! Since 1986, Key West Boats has continuously set new safety, construction, and design standards. Our skilled team, from our laminators and riggers to our sales and engineering department, is dedicated to every boat we build, and we are constantly working to improve our product. Our dedication to each boat and inspiration for new ideas come from the most important people: our customers. We value your input and encourage you to share your thoughts and the memories you make aboard your 203DFS with us! Owning a boat is a fantastic experience, and we dedicate ourselves to making sure your 203DFS will be the best experience you have on the water.

Like all Key West Boats, we designed and built the 203DFS to ensure owners' safety. That safety includes but is not limited to its upright and level flotation that makes the 203DFS both unsinkable and guaranteed to remain upright if swamped. Although incredibly safe by design, your 203DFS is only as safe as how it is operated. Regardless of your experience, we encourage you to read the generic manual we have provided with your boat and other resources for information on the rules of the road and safe boating practices to ensure you are operating your boat safely and within the rules at all times. Like all Key West Boats, we designed 203DFS to be low maintenance, ergonomic, and an efficient boat to maintain and operate. Familiarizing yourself with the boat systems and working closely with your dealer will go a long way in providing that. We are pleased to provide you with this guide and schematics of the systems in the 203DFS to ensure you are confident before you step aboard for your first memorable trip! Following the information in this guide and your dealer's service plan will help to provide you with many years of reliable service so that you can consistently enjoy your time on the water, experience things only possible with a boat, and discover the joy that owning a 203DFS brings!

Finally and most importantly, like all Key West Boats, your 203DFS was built by a dedicated and experienced team who gave it a unique and personalized story that started when you and your dealer gave it a unique and one-of-a-kind character. Over 35 years and over 50,000 boats later, we still look at each boat we build as having a unique personality and story that is vital to our family. Your 203DFS is not just another "unit," and becoming the owner of this 203DFS does not make you just another "customer." It makes you a part of our family, which we have been dedicated to for over 35 years and has over 50,000 unique and personalized stories. We are honored to have you as part of our family so we can include you in our story. Safe passages and tight lines!

Sincerely,

The Key West Team



Fuel System

Tank

The 203DFS is equipped with a single, 50 Gallon, pressurized fuel tank. The tank is of aluminum construction and is secured/insulated with foam during the construction of the boat. The tank is located on centerline between the aft livewell and aft end of the console. There is a sending unit installed in the tank. Inspection ports in the deck and head compartment provide access to tank fittings. The tank vents through the gas fill that incorporates a cap that allows air to move into and out of the tank.

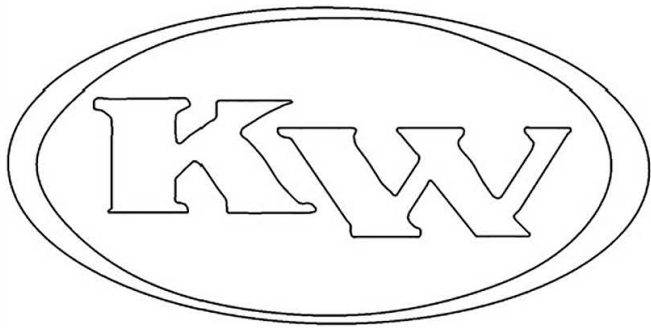
Fuel Supply

There is a fuel pickup installed in the tank. The pickup incorporates a shut off valve along with an anti-siphon valve that can be accessed through the in deck inspection plate under the leaning post. There is an on deck fuel fill located on the port side of the boat, just forward of the console. Access to the fill is provided through an inspection port. The fuel fill also incorporates a vent that allows venting of the tank. It is recommended that these connections be inspected annually.

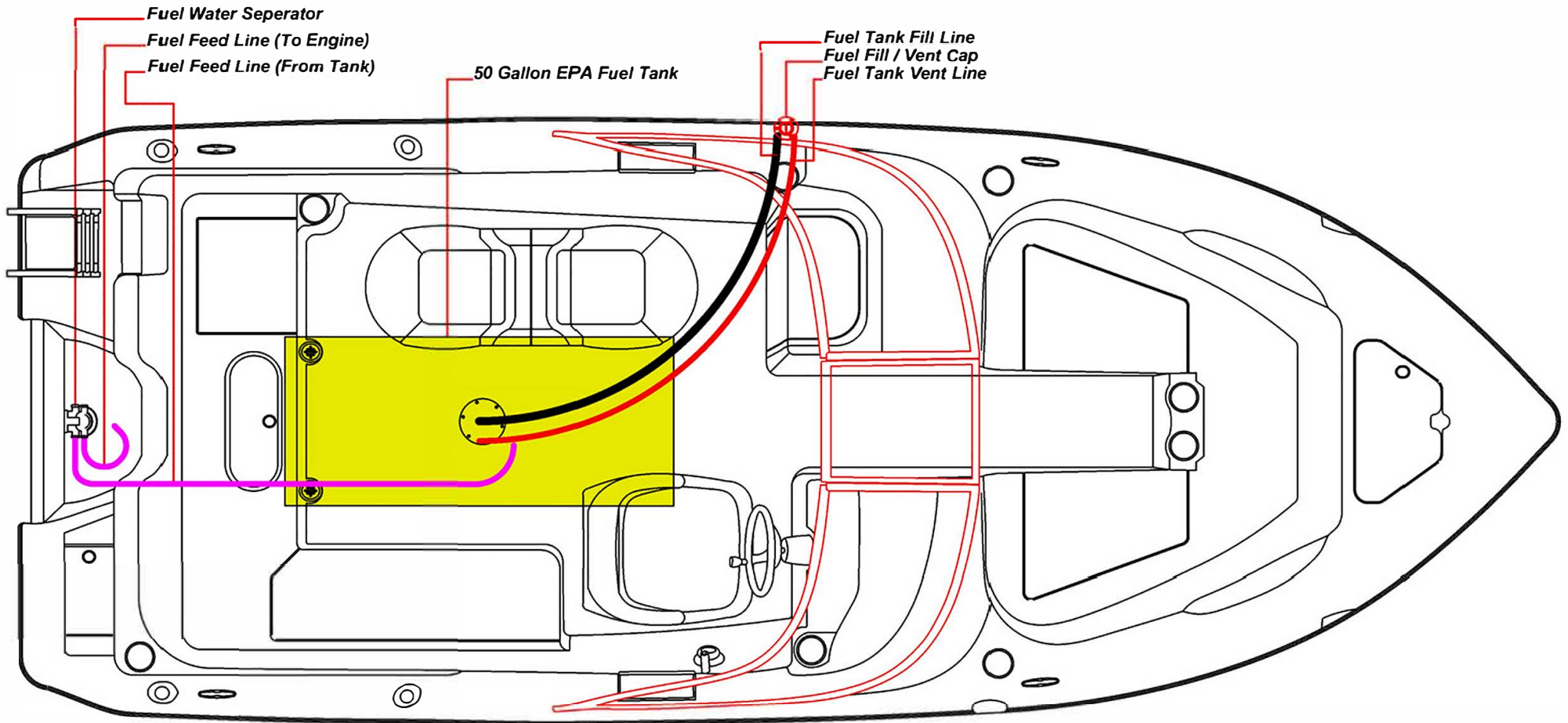
The 203DFS will come pre-rigged from the factory with an engine matched fuel water separator. The fuel water separator is installed in the bilge and accessed through the bilge access hatch located in the splash well. The Fuel Water separator should be checked periodically to ensure the fuel is free of water. Fuel should be disposed of in an approved waste collection device when servicing/replacing. The filter must be filled with fuel after servicing/replacing them in order to prime the engine. A primer bulb for the engine is located in the engine splash well. It is used to prime the engine and system before starting the engine. This should be done after service or after periods of downtime for the boat. When fueling your boat, whether on trailer or at a marina, the pressurized system will prevent overfilling. Any blockage of the vent and or vent line will prematurely trigger the shut off on the fuel nozzle and will prevent you from filling the tank completely. It is recommended to inspect your fuel system annually to ensure that all hose fittings are secured and the lines are free of any kinks. All components of the 203DFS fuel systems are approved for use with ethanol blended fuels up to 10%. E85 fuel should never be used. Key West recommends using non ethanol fuels whenever possible to reduce the risk of moisture retention in the fuel system, especially in areas of high heat/humidity.

Due to the emission requirements of the EPA, certified fuel tanks and systems will not fill to the top of the tank. Instead, there will be a ullage in the top 10% of the tank. The specified capacity of the tank accounts for this ullage when the tank is static and level. Therefore, it is important to make sure the boat is as level as possible when filling the tank. Any forward or aft tilt will cause fuel to collect in one end of the tank and prematurely reach either the forward or aft tank vent. When fuel reaches these vents, it triggers the shut off. When the boat is level, fuel will reach these vents at the same time and allow the maximum quantity of fuel into the tank. The tank's ullage will also affect your fuel gauge as the tank's sending unit will not reach the top of the tank, even when the tank is filled. This will cause the fuel gauge to not read full, even though it is. Do not rely on the fuel gauge exclusively as variations will occur.

The stated capacity of the tank DOES NOT reflect the quantity of usable fuel in the tank. The tank and its pickup are designed to allow as much fuel to be used as possible when on plane or in the boat's level floating position, but it will not allow all fuel to be used. When using your boat, it is a good practice to keep a log and a running count of how much fuel you've used.



Fuel System Schematic



Raw Water System

Raw Water Supply

The boat features a single thru hull scoop pickup on the transom for raw water intake.

Livewell System

There is one 800GPH livewell pump. It is mounted directly to the thru hull pickup. The pump provides raw water to the transom livewell. The pump has an independent switch and fuse(See Electrical Schematics). The livewell pump is a centrifugal pump that is not pressure regulated. Therefore, it is recommended that the pump only be used when using the livewell. The pump is self-priming. Before activating the pump, make sure the livewell fill valve is open and than switch on the pump. It is important to check the livewell pump annually and periodically spray it with a corrosion inhibitor.

Standard Raw Water Wash System

The 203DFS is equipped with a raw water wash system. The system uses the livewell pump to provide raw water to the provided washdown hose. Please note though that using the system does not allow use of the livewell. To use the system, unscrew the livewell fill valve on the livewell and thread the hose onto the inlet. The livewell pump is not pressure regulated. Therefore, only engage the livewell pump when you are going to use the washdown. Do not leave the pump on when not using the washdown.

System Operation and Maintenance

When using the livewell pump, whether as a washdown or aerating your livewell, it is important to pay attention to the water you are operating the boat in. Operating the pumps in shallow /muddy water or water with high amounts of floating debris such as grass or trash may result in ingestion and damage the pumps. Loss of pressure in pumps may be the result of contaminants blocking the thru hulls, binding of the pumps impeller, clogged strainer basket and/or blockage in lines. When operating in the contaminated water, check the supply of and quality of water to the livewell and/or wash down frequently. Any loss of pressure or flow should be addressed immediately to prevent damage.

Fresh Water System

Fresh Water Supply

Fresh water is stored in a 6 gallon tank located under deck, directly aft of the rear fuel tank bulkhead. Access to the tank is achieved through the access hatch in the engine splash well. The tank features a fill line, vent line and supply line. These fittings should be checked annually. It is critical that only potable water be used in the tank. Failure to do so will require overhaul of the entire freshwater system.

Fresh Water Fill and Vent

The fresh water tank is filled from a fill deck plate marked "WATER". It is located on the port side of the engine splash well. Before filling the tank, verify the quality of the water and make sure area around the fill is free of containments that could enter the tank. While filling, verify the tank is venting through the tank vent which is located adjacent to the water fill. An absence of air escaping from the vent may indicate a blockage or kink in the vent line. This will result in the tank failing to fill all the way which will show in water flowing out of the fill well before coming out of the vent. It will also diminish the performance of the fresh water system as a blocked vent will create a vacuum in the tank as water is used, thereby resulting in less water to the pump, continuous cycling of the pump and loss of water pressure. This could ultimately result in damage to the pump. Check the vent line periodically to ensure there are no kinks or blocks.

Washdown Pump

The fresh water system is fed by a pump that is located at the rear of the port transom storage box. The pump is controlled by a switch and fuse(See Electrical Schematics). Water is supplied to the pump from the tank outlet located on the bottom of the tank. The fresh water pump features an in-line strainer for collecting any debris that could damage the pump. The strainer should be checked periodically and features a clear cap for easy inspection. If any debris is found, remove the strainer screen by untwisting the clear cap and clean the screen. The pump features a built in pressure regulator that will shut the pump off when pressure is achieved in the system. The fresh water faucet is located on Forward wall of the passenger console. If the system has not been used for a period of time, it may be necessary to prime/bleed the system of any air. Before activating the pump, open the fresh water washdown faucet and than switch on the pump. When the system is free of air, you can either close the faucet or shut off the pump. It is important to check the washdown pump annually and periodically spray it with a corrosion inhibitor.

System Operation and Maintenance

Only use potable fresh water in the system. Always verify there is sufficient quantity of water in the tank before activating either the washdown or mister system. Insufficient water quantity will cause the pumps to run dry and may lead to failure/damage. Before using the freshwater system for the first time on the water, fill the tank and cycle all the water out to ensure the tank is clean and free of contaminants. Afterwards check strainer(s) for debris and clean if necessary.

Raw Water System Troubleshooting

Livewell Pump Runs, but does not pump water

- Pickup is blocked and is preventing water from reaching the pumps. Put boat in reverse to clear the intake. If problem persists, do not continue to operate pumps. Clean intake when boat is out of water to remove debris.

Livewell pump runs, but water flow is reduced.

- Debris is partially blocking intake. Clear debris
- Baitwell sprayer head valve is not fully open. Open Valve fully
- Hose(s) are damaged and are either leaking and/or sucking air. Check hoses
- Low Voltage to Pump. Check connections for loose or corroded wiring. Check battery voltage
- Pump is damaged or defective. Replace Pump

Fresh Water System Troubleshooting

Fresh Water Pump Runs, but does not pump water

- Water Tank is empty. Fill the Tank
- Intake hose from the tank to the pump is damaged causing the pump to suck air. Check Hose
- Strainer is clogged. Clean Strainer

Fresh Water Pump Runs, but flow is reduced

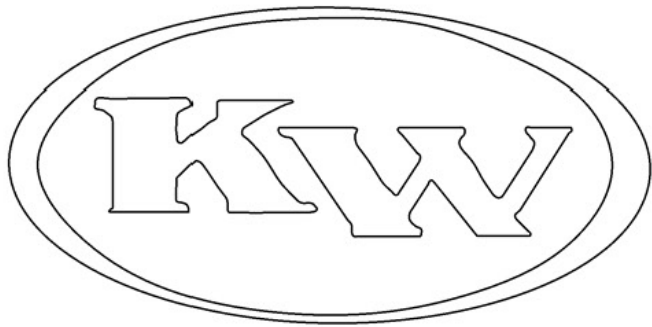
- Intake hose from the tank to the pump is damaged causing the pump to suck air. Check Hose
- Water Tank vent line is kinked or blocked creating a vacuum in the tank. Check Vent Line
- Strainer is partially clogged. Clean Strainer
- Fresh Water Faucet is not fully open. Open Valve fully
- Partial block or kink in hoses between pump and faucet. Check hoses
- Low Voltage to Pump. Check connections for loose or corroded wiring. Check battery voltage
- Damaged or defective pump. Replace pump

The Fresh Water wash down pump continues to run, even after faucet is closed

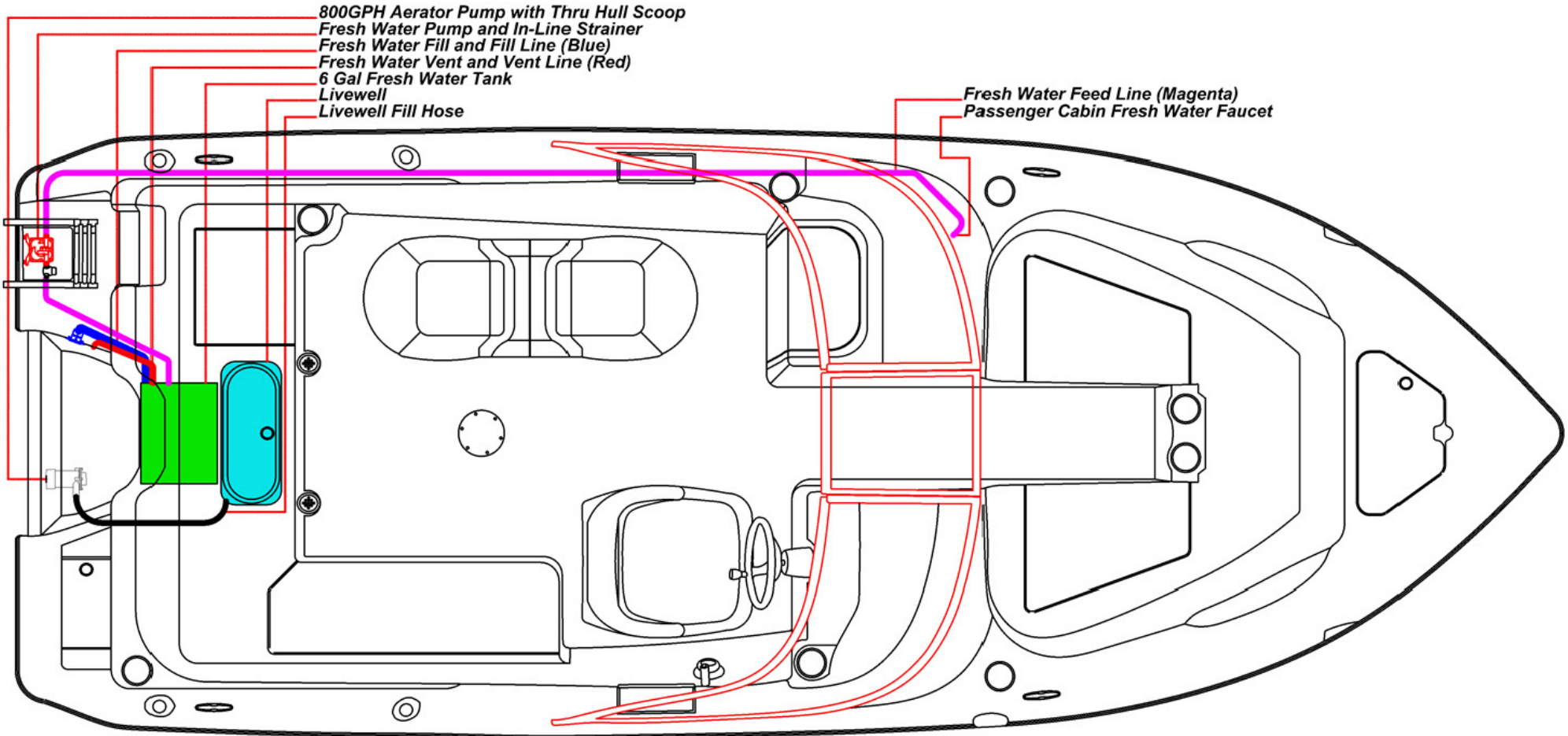
- Intake hose from the tank to the pump is damaged causing the pump to suck air. Check Hose
- Water Tank vent line is kinked creating a vacuum in the tank. Check Vent Line
- Strainer is clogged. Clean Strainer
- Pressure Regulator in pump is defective. Replace pump or pump regulator

Fresh Water Tank runs out of water excessively fast

- Leak in the tank or leak in intake hose going to the pump. Check tank integrity by filling all the way and inspect for leaks. If Leak is found, consult dealer regarding repair /replacement. Check connections on intake hose to the pump for leaks.
- A kink/block in the Water tank vent line can cause the tank to fill up prematurely, even though it isn't full due to lack of air escaping. Check tank vent line and ensure it is not blocked or kinked.



Raw/Fresh Water Schematic



Drainage System

General Overview

All water in the boat is drained either via gravity or pump. It is either drained directly overboard or to the aft bilge where it can be drained out either via the garboard drain plug or the bilge pump. It is important to check the drainage system frequently to verify water flows freely, hoses are secure and there are no leaks. The drains and discharge pumps are as follows starting at the bow:

Anchor Locker: Gravity drain along centerline of hull to aft bilge

Port/Starboard Bow Lockers: Gravity drains connected via T-Connector. Drain to aft bilge.

Passenger Cabin Sink Drain: Gravity drain connected via T-Connector to bow Locker drains. Drains to aft bilge

Passenger Cabin and Console Recess Drains: Gravity drains, drain directly to the bilge

Port Cockpit Drain: Gravity drain to port transom 1-1/2" Thru Hull

Starboard Cockpit Drain: Gravity drain to starboard 1-1/2" Thru Hull

Port Transom Storage lockers: Gravity drain directly to aft bilge

Livewell Overflow Drain: Gravity drain connects via T-Connector to Livewell Drain

Livewell Drain: Gravity Drain to 1-1/8" Thru Hull on transom

Transom Cooler Box Drain: Drains into Ski Locker

Ski Locker Drain: Gravity drain to aft bilge

Aft Bilge Pump: Located in aft bilge, discharges to aft port thru hull near transom

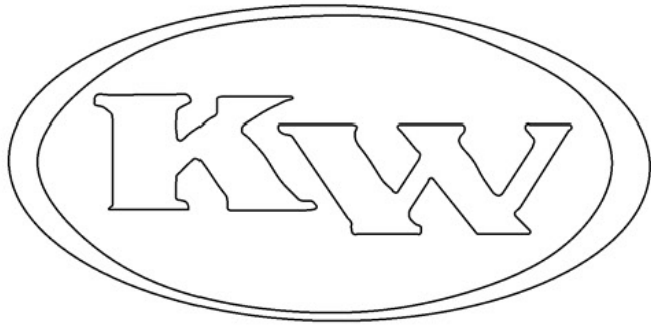
Floor Drain Overview

Two of the most important pieces of equipment on your boat are the cockpit floor drains as their operation is integral to your safety on the water. At 1-1/2" in diameter, they are designed to allow massive quantities of water to leave the cockpit of your boat in a very short period of time in the event of a swamping or extreme down flooding event. All the drains in your boat operate this way, however, the floor drains are designed so that water can only flow in one direction; out of your boat. The drain features a unique design that acts like a check valve thereby preventing back flow of water into the cockpit of your boat.

The design of the drain and its operation is solely dependent on the foam ball and seal ring. Any degradation in the foam will compromise the balls ability to seal against the seal ring. Therefore, do not apply power washers or any cleaning chemicals directly to the drain area as this will compromise the foam in the ball. When using chemical cleaners in your boats interior, use a sufficient quantity of water to dilute the chemical(s) when spraying off so that they do not affect the foam ball when draining out.

The seal ring needs to be kept free of debris so that foam ball will seal flush. The drain features a grate so that debris cannot flow into the drain. In the event that a sufficient amount of debris collects around the seal, the grate and top of the drain assembly can be removed. Use a spanner wrench to unscrew the top of the drain and clean the drain assembly. This will also provide access to the foam ball which can than be removed and replaced if necessary. Only do this if it becomes evident that ball is not sealing properly. This will be manifested by small amounts of water coming through the drain when the boat is sitting at rest in the water. **DO NOT** remove the drain while the boat is in the water.

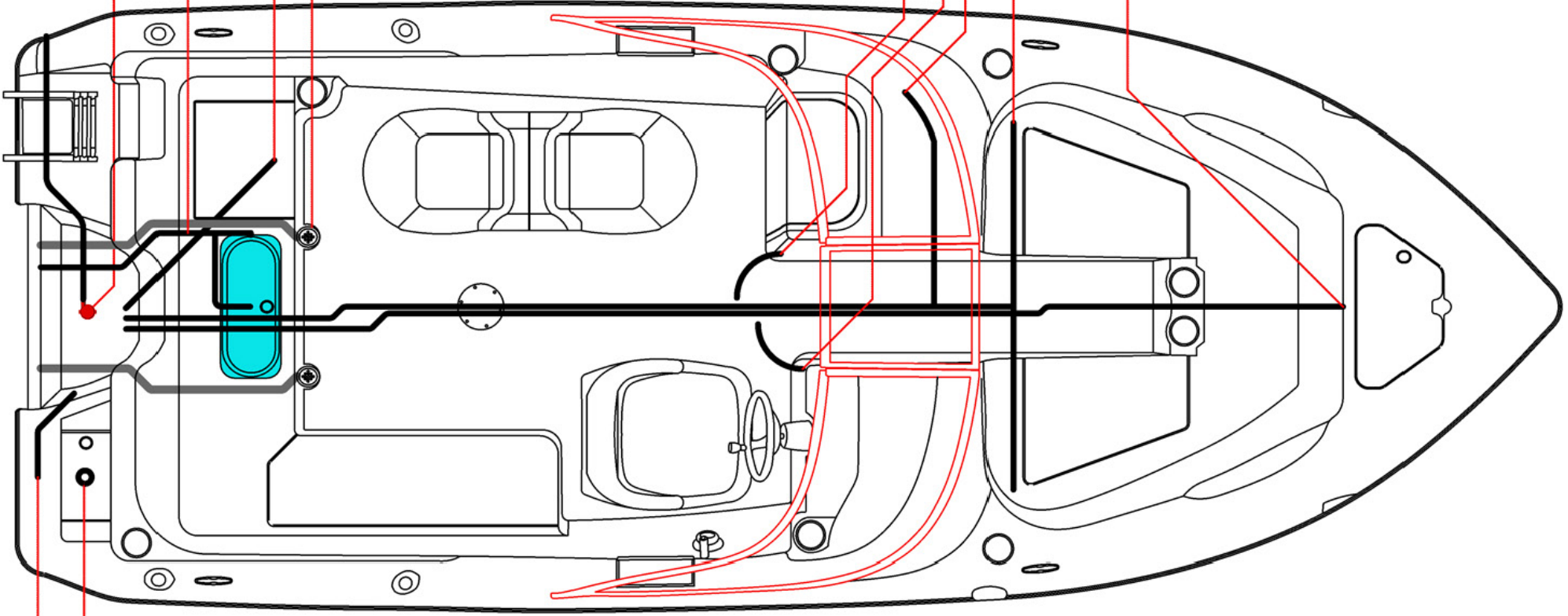




Drainage Schematic

- 500GPH Auto Bilge Pump to Port 1-1/8" Thru Hull
- Livewell Drain and Overflow to 1-1/8" Transom Thru Hull
- Port Transom Dry Storage Drain to Bilge
- Port/Starboard Cockpit drains to 1-1/2" Transom Thru Hulls

- Passenger Console Drain to Bilge
- Driver Console Drain to Bilge
- Sink Drain to Bilge
- Port/Starboard Bow Lockers to Bilge
- Anchor Locker Drain to Bilge



- Transome Cooler Box Drain to Ski Locker
- Ski Locker Drain to Bilge

Drainage System Troubleshooting

Reduction in water flow from bilge pump

- Blue Intake screen on bottom of pump is clogged with debris. Clean Intake Screen
- Voltage to the pump is low. Check for corrosion and loose connections. Check battery Voltage
- Discharge hose is blocked or kink. Check discharge hose and clean/repair
- Pump is defective. Replace Pump

Bilge Pump continues to run even though bilge is dry

- Float switch on pump is stuck due to debris or build up on switch. Ensure float switch is clean and free of debris.

Bilge is full of water and pump is not running

- The Inline Fuse for the automatic bilge pump is blown. Replace the Fuse
- The battery is dead. Check voltage and charge if necessary
- The pumps impeller is clogged by debris. Clean pump impeller
- The connections/wires to the pump are corroded. Check and replace connections/wires
- The Built-In float switch is defective. Replace Pump
- The Pump is defective. Replace Pump

Bilge pump will not run when the manual switch on the helm is engaged

- ATC Fuse on fuse block is blown. Replace Fuse.
- The battery switch is off or the battery is disconnected. Turn on battery switch/reconnect battery
- The pumps impeller is clogged by debris. Clean pump impeller
- Switch is defective. Replace the switch
- The connections/wires to the pump are corroded. Check and replace connections/wires
- Pump is defective. Replace Pump

Electrical System

General Overview

The boat is equipped with a 12V DC Electrical system that can be equipped with an optional AC battery charger. The boat can only be rigged for a single motor. If the boat is rigged without an optional battery selector switch, the boat will be rigged for x1 Group 24 battery. If the battery selector switch is installed, the boat will be rigged for x2 Group 24 batteries. The battery(s) will provide power to the engine and house systems.

12V power is distributed to the 12V factory installed systems through ATC fuses located on a fuse block inside the console. All 12V systems are grounded via a single 10GA black wire attached directly to the negative post on the battery. A 30amp main circuit breaker is installed in the console to protect the house systems from overload and is connected either directly to the batteries or the optional battery selector switch. Additional circuit breakers for the auto bilge pumps and stereo memory are wired directly to either the battery or battery selector switch.

The system is designed so that turning the battery switch off will still allow the bilge pump to function in an automatic mode. Key West recommends that boats that are going to be left in the water or in a boat lift, where access to the drain plug is not feasible, be installed with a battery charger to prevent discharge by the bilge pump. Trim Tabs and optional power steering are connected directly to the battery and feature overcurrent protection. They do not energize until the engine ignition switch is turned to the “On” position.

Battery Selector Switch (Optional)

As an option, a battery selector switch can be installed. The battery selector switch is installed on the starboard side of the console. The battery switch provides power to the engine and 12V accessories. The switch is a dual circuit switch and has 4 positions (OFF, 1, 2, Both). This allows power to be supplied by either battery 1, battery 2, or both simultaneously. The switch also directs the charging current from the engine's alternator.

If position “1”: is selected on the switch, the engine and 12V accessories will receive power from Battery 1 and the engine's alternator will charge Battery 1. Battery 2 will be isolated and in reserve. If position “2”: is selected on the switch, the engine and 12V accessories will receive power from Battery 2 and the engine's alternator will charge Battery 2. Battery 1 will be isolated and in reserve. If position “Both” is selected, the switch connects the batteries in parallel and the engine and 12V accessories will receive power from both batteries. The engine's alternator will charge both batteries simultaneously as well. When the boat is underway, placing the switch in the “Both” position is recommended so that both batteries charge. When the boat is moored (Engine Off) and 12V accessories are being used, it is recommended to select position “1” or “2” so that one battery is isolated and can be used to crank the engine. When using the windlass, it is recommended to place the battery switch in the “Both” position due to the high power demand.

Electrical System

Battery Charger

As an option, a battery charger can be installed that will charge one or both batteries, depending on the battery installation. The battery charger converts AC power into DC power that is used to charge the batteries. The charger is powered by a plug on the console that receives a standard 110V plug from the female end of a 110V extension chord. It allows you to plug the boat into a regular 110V outlet. Please consult the battery charger's manual before using your charger for the first time. If the optional Battery selector switch is installed, it does not need to be on to direct the charge from the battery charger.

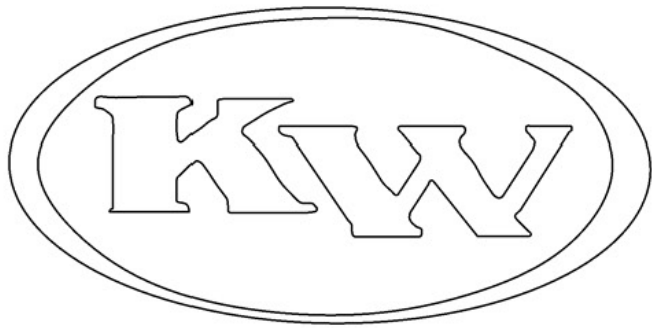
Dealer Installed Equipment

When your 203DFS arrives at your dealer, the dealer will install batteries and may install additional equipment. It is important to check with your dealer regarding the batteries installed in your boat. The three common types of batteries are Wet Cell, Gel Cell and AGM Batteries. Gel Cell and AGM batteries are sealed and maintenance free. If your boat is equipped with Wet Cell batteries, they will require the following inspections and service. Regularly check the electrolyte levels in the batteries and add DISTILLED WATER if needed. If a battery charger is used regularly, the electrolyte levels will need to be replenished more often. Fluid level should be just above the plates in the battery. Do not overfill. Only use distilled water. If your boat is installed with a battery charger, before using the charger, make sure the charge mode is set to the battery type (Wet, Gel, or AGM) installed on your boat. If a battery needs to be replaced, make sure it is the same type as the other battery. It is okay to install a larger or smaller battery provided it is the same type (Wet, Gel, or AGM) as the other battery in the boat.

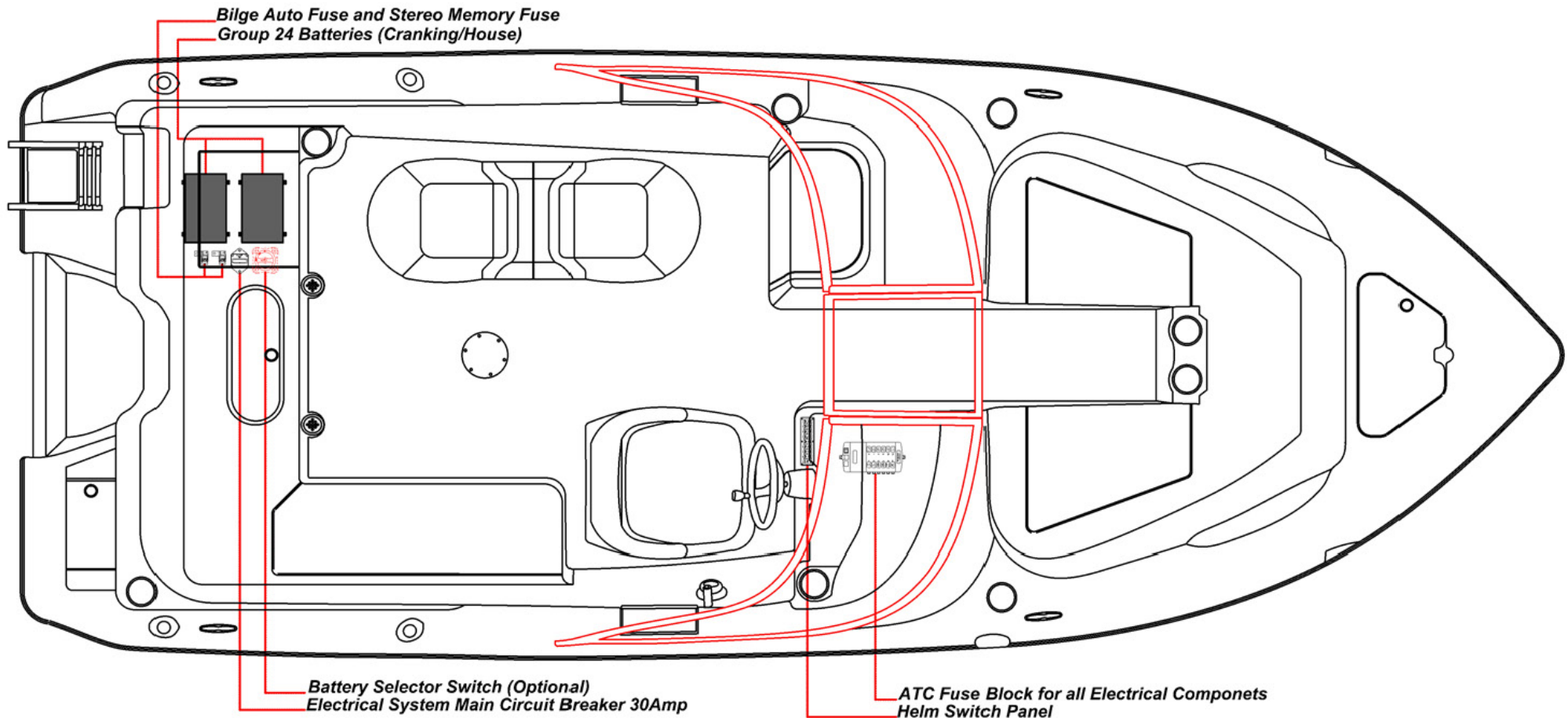
Consult with your dealer regarding wiring and installation of electronics installed at the factory. If equipment is connected to available accessory switches on the dash panel, your dealer's service department should verify the capacity of the equipment being installed and install the appropriately sized ATC Fuse. Verify that installed equipment does not overload the capacity of the 30amp main breaker installed inside the console when all 12V accessories are running.

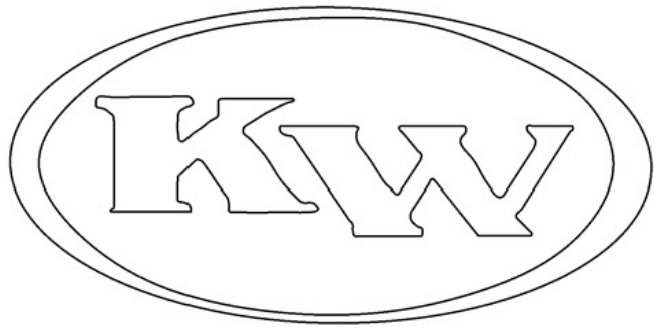
Electrical System Maintenance

All connections in the electrical harness feature deutsche connectors and heat shrink butt connectors to minimize corrosion. Key West recommends that all connections and terminals be checked at least twice a year and sprayed with a corrosion inhibiting spray at least once a year to protect and maintain the integrity of electrical connections.

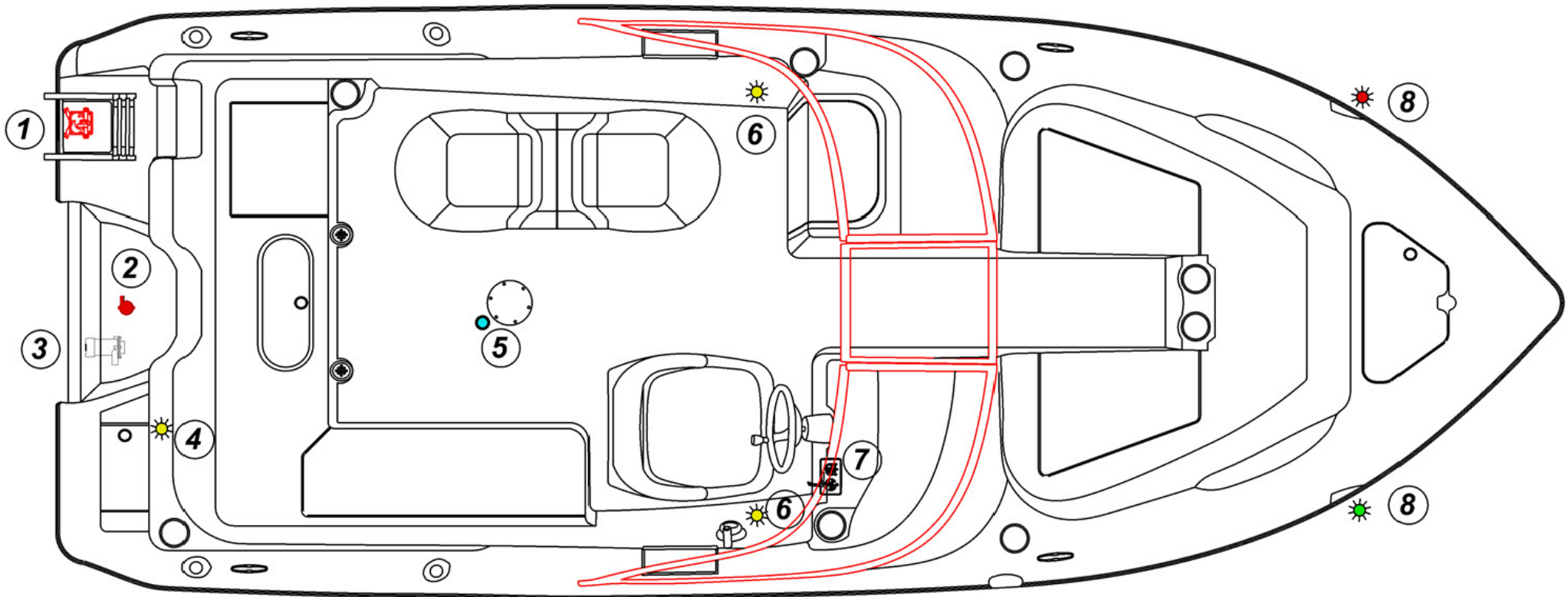


12V Electrical Schematic





12V Electrical Schematic



- 1) Fresh Water Pump - 16GA Brown/Green
- 2) Bilge Pump Manual - 14GA Brown
- 3) Livewell Pump - 16GA Brown/Orange
- 4) Anchor Light - 14GA Grey/White

- 5) Fuel - 16GA Pink
- 6) Courtesy Lights - 16GA Blue/White
- 7) Ignition - 14GA Purple
- 8) Navigation Lights - 14GA Grey

1)	16GA	GRAY (NAV LTS)
2)	16GA	GRAY/WHITE (ANCHOR LT)
3)	16GA	ORANGE/WHITE (HORN)
4)	16GA	BLUE/WHITE (COURT LTS)
5)	14GA	BROWN/ORANGE (RAW WATER)
6)	14GA	BROWN/GREEN (LIVEWELL)
7)	14GA	BROWN (BILGE MANUAL)
8)	16GA	PINK (FUEL)
9)	16GA	PURPLE (IGNITION)
10)	16GA	CAVITY PLUG
11)	14GA	CAVITY PLUG
12)	16GA	CAVITY PLUG

1)	10GA	RED (PANEL POWER)
2)	10GA	BLACK (PANEL GROUND)

			KEY WEST BOATS		
			TITLE 203DFS HARNESS		
SCALE	07/06/2015	SHEET			

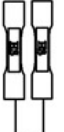
IGNITION
16GA PURPLE




HORN
16GA ORN/WHT
16GA BLK




FUEL
16GA PINK
16GA GRN




BILGE PUMP
16GA BRN (MANUAL)
16GA BRN/RED (AUTO)
16GA BLK (GROUND)



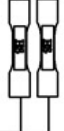
LIVEWELL
16GA BRN/GRN
16GA BLK




FRESH WATER
16GA BRN/ORN
16GA BLK




ANCHOR LT
16GA GRY/WHT
16GA BLK



Ground Splice (All Grounds)



NAV LTS
16GA GRY
16GA BLK



COURT LTS
16GA BLU/WHT
16GA BLK



TO BATT GROUND
10GA BLACK
16GA GREEN (FUEL)




ATC FUSE
7.5 AMP



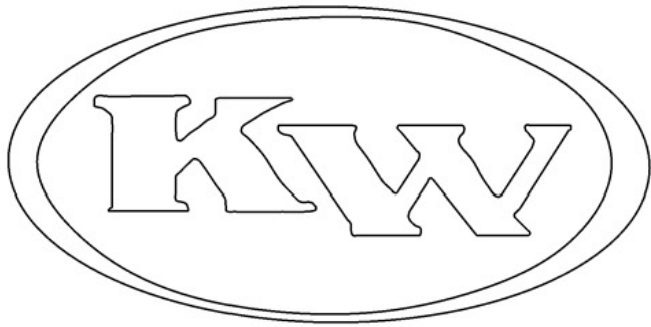
30A Breaker



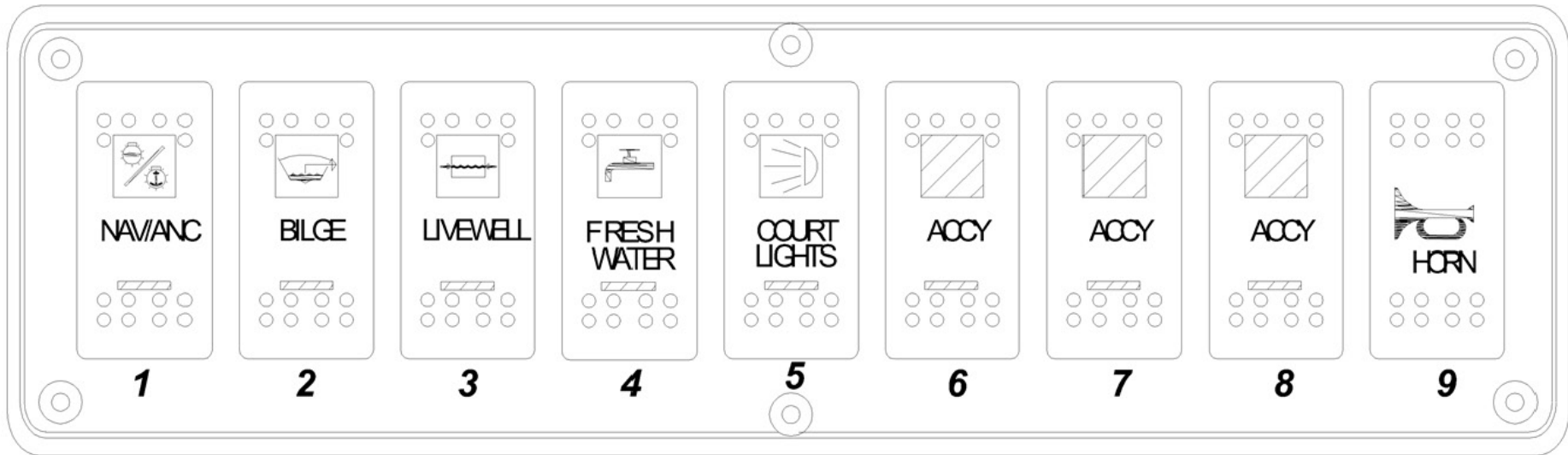
BILGE PUMP (AUTO)
16GA BRN/RED



To Battery/Battery Switch



12V Switch Panel Schematic



1) Navigation(Top) / Off(Middle) / Anchor(Bottom)

2) Off(Automatic)/ON - Activates Bilge Pump in manual mode. Return to off position for Auto mode.

3) Off/On - Activates Aerator Pump for Livewell

4) Off/On - Activates Fresh Water Pump

5) Off/On - Activates Interior Courtesy Lights

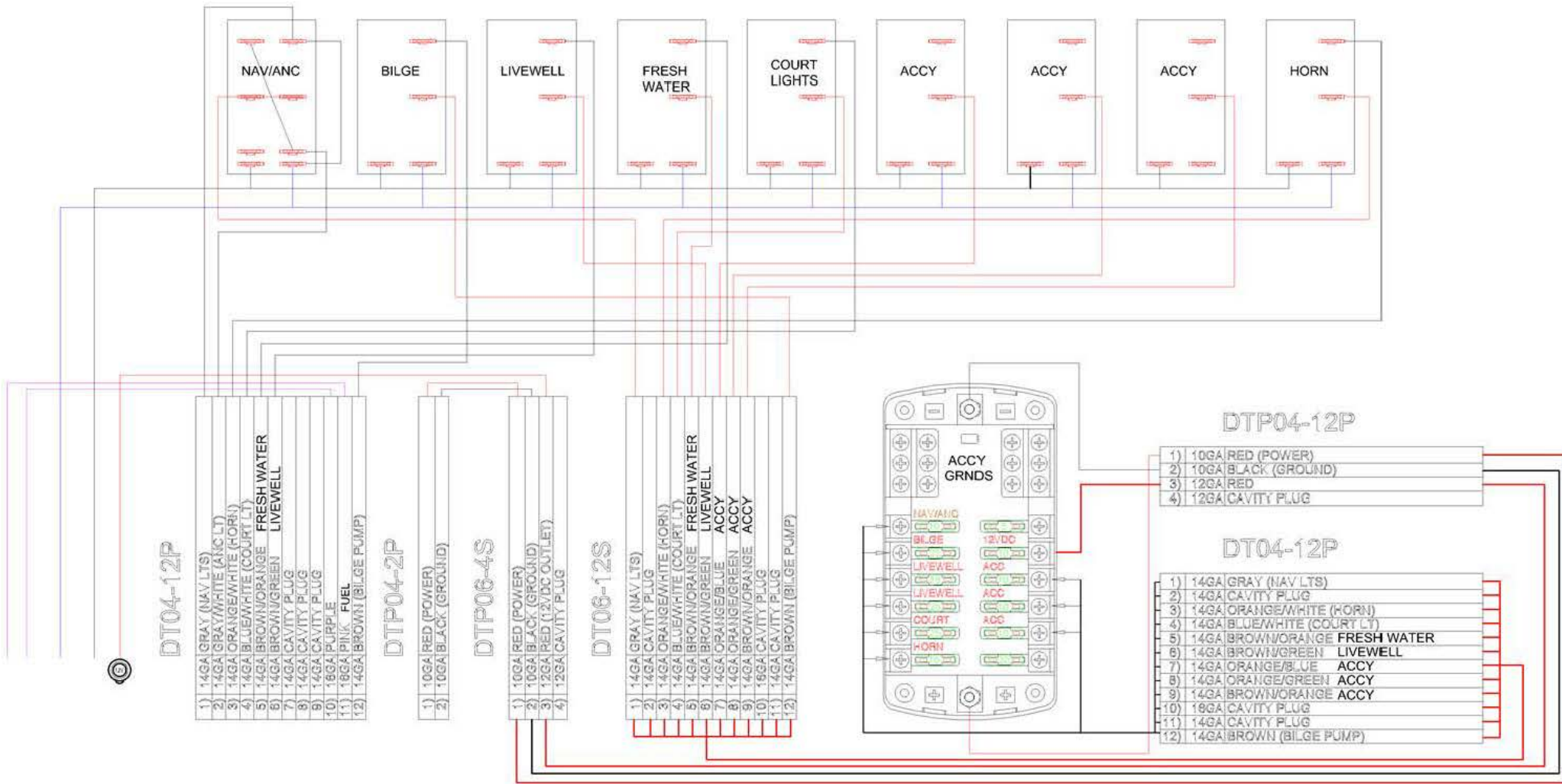
6) Off/On - Activates Accessory

7) Off/On - Activates Accessory

8) Off/On - Activates Accessory

9) Spring Loaded Off/On - Press to engage horn. Release to Disengage

Note A: If optional equipment is installed at the Factory, Accessory Switches will be used and labeled according to their function and will therefore, no longer be available as accessory switches. Please consult your dealer regarding installation of additional equipment requiring the use of an accessory switch to verify amperage requirements. Do not "piggy back" off labeled switches as it may overload the rated amperage of the Fuse.



	KEY WEST BOATS	
	TITLE 203DFS HARNESS SWITCH HARNESS	
SCALE	07/06/2015	SHEET