

3125 | 3425 GFX OFFSHORE

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# SECTION 1 — WELCOME ABOARD

Please read this manual completely before operating your boat for the first time. It is a valuable reference and should help you answer most questions about caring for your boat, how to operate it and your responsibilities as the boat's operator.

Take the time to complete and submit the Warranty Registration. Failure to submit the registration or neglect or improper care of your boat may void the warranty. The best way to protect your new KingFisher is to carry out regular maintenance and inspect your boat regularly as recommended in this guide.

This manual refers to other manuals that come with your boat's equipment and accessories. It is essential you read all manuals and become familiar with the care, maintenance and safe operation of all the equipment aboard your boat. KingFisher wants you to maximize your boating experience and to be safe every time. If you are missing manuals, see your KingFisher dealer for a replacement.

In Section 1 of this manual, you will find a place to record information such as your engine and boat serial number, and your dealership contact information. Keep this information with your boat for easy reference.

If you have any questions about your boat, consult your KingFisher dealer. If you have any questions about boating regulations, contact the local United States Coast Guard, Transport Canada Office of Boating Safety or Canadian Coast Guard, Fisheries and Oceans Office.

Before you go boating it is wise to read your boat Owner's Manual and go through the pre-trip safety checklist found in Section 2. Ensuring that your boat is in perfect working order before beginning a voyage will allow you to get the most enjoyment out of your boat.

# **Important Identification Number Records**

Record your serial numbers of your hull and motor(s). The Hull Identification Number or H.I.N. is located on the starboard side of the transom. Consult the engine manufacturer's owners manual for engine serial number location.

HULL IDENTIFICATION NUMBER:  QBSY	
MOTOR 1 SERIAL NUMBER:	
MOTOR 2 SERIAL NUMBER:	
KICKER SERIAL NUMBER:	
<b>Note</b> : It is also recommended to record the serial number of other significant items if your boat is so equipped.	ers

# SECTION 2 — SAFETY INFORMATION

# PREPARATION

Before starting your voyage, ensure that you are familiar with applicable boating regulations for the region. These can be obtained from Transport Canada Office of Boating Safety or your local United States Coast Guard office.

Below is a safety checklist that should be performed every time you head out on the water.

- ☐ Ensure your boat insurance and vessel license are complete and up to date
- ☐ Check your on-board safety equipment, including but not limited to:
  - Paddles
  - Class 5BC Fire extinguisher in good working condition
  - · Bailing container
  - · Watertight flashlight
  - Type A, B, or C flares on board and that they are not expired. (Vessels less than 6m must carry 3, and vessels over 6m must carry 6)
  - · Buoyant heaving line at least 15m in length
- □ Check the horn
   □ Check all lights
   □ Check your radio, cell phone and or signalling device
   □ Check your bilge pump
- Ensure every passenger has an approved, properly fitting personal floatation device
- Check all seats and ensure they are firmly attached
- Check battery and electrical system for damage or corrosion and spare fuses
- Check the steering for smooth operation through the full range of travel
- Ensure that all loose items are safely and securely stowed
- Check for any damage to the boat
- Check that the hull drain plugs are in place
- Check engine fluid levels
- Check your capacity rating and ensure your boat is not overloaded or overpowered
- Check bilge for water, fuel and oil.

- ☐ Ensure you have a container to collect any garbage
- Check the weather report
- □ Always have someone along who can operate the boat if you become incapacitated
- Make sure you and your guests are wearing approved personal floatation devices
- ☐ Instruct your guests on safety procedures and equipment on board
- □ Leave an itinerary of your trip or "Float Plan" with someone on shore and have them contact local Search and Rescue if you don't return at the appointed time

# SAFE BOATING

It is strongly recommended to read either "The Safe Boating Guide" (Fisheries and Oceans Canada, Coast Guard), or "A Boater's Guide to the Federal Requirements for Recreational Boats" (US Coast Guard) prior to operating your boat. Similar publications may be available through other state or provincial bodies. Check with your local governing body to see if an operator license is required in your jurisdiction. Marine safety and boat handling courses such as those offered through Power Squadrons are also highly recommended.

# IMPORTANT LABELS AND WARNINGS

For your safety, please do not remove any decals.

# **GENERAL INFORMATION**

Your boat is supplied with a number of identification and warning labels. These labels are intended to inform and protect the boat operator and passengers. Any lost or damaged labels should be immediately replaced. Failure to comply with the warnings can result in severe injury or death. Should you need replacement warning labels, conformity/capacity labels, or instruction labels, contact your dealership.

# **WARNING LABELS**

Be sure to familiarize yourself with the following warning labels: NOTE: Your boat only includes the warning label if applicable.

#### Decal 1

Located on the starboard side rear deck tray and relates to the shore power system

Fuel system inspection decal is located inside the bilge doors

Boarding ladder warning label is located on the rear swim platform

#### WARNING CAUTION Avold serious Injury or Carbon Monoxide (CO) is produced by all Operation of death from fire or explosion gasoline engine and generator sets. To auxiliary engine resulting from leaking fuel. avold Injury or death from (CO), always and main engine Inspect fuel system for provide adequate ventilation to cabin or concurrently may leaks at least once a year. covered areas on boat. result in engine If CO poisoning is suspected: damage, Please To avoid serious injury or consult owners death, do not use or try Shut down engine(s) and generators manual on Move victim (s) to fresh air Contact Medical Help to access boarding operation of fuel ladder, swim platform or quick disconnect - Investigate source of CO and take splash well when engines corrective action system. are running.

#### Decal 2

Auxiliary and main engine operation warning decal is located above the auxiliary steering station

#### Decal 3

Winterization warning decal is attached to the sink faucet and should be removed after the system is flushed

#### Decal 4

#### Decal 5

Auxiliary station visibility warning label is located above the rear helm station

# TOILET WATER/WASHDOWN SYSTEM PICKUP-SHUT OFF WHEN NOT IN USE

# 

Watertight Closure Keep shut while under way.

PN# 12846

#### CAUTION

Operation of auxiliary engine and main engine concurrently may result in engine damage. Please consult owners manual on operation of fuel quick disconnect system.

# CAUTION

The water
system has been
winterized, flush
thouroughly with
fresh water
before use.

#### Decal 6

Water pickup shutoff label is located by the thru-hull petcock in the headstall, beside the toilet

#### Decal 7

The watertight closure decal is located near all doors or hatches, which should be kept closed while underway

# **!** WARNING

Gasoline vapor can explode.

Before staring engine, operate the blower for 4 minutes an check engine compartment bilge for gasoline vapors

# **NARNING**

Visibility from this helm station is limited.

Avoid serious injury or death from collisions.

Maintain lookout as required by "Rules of the Road".

Read Owners Manual.

PN# 11295

# CAPACITY / CONFORMITY LABEL INFORMATION

Every vessel is supplied with a label indicating it conforms to related federal requirements as of the date of manufacture. Vessels over 6 m (19' 8") in length are required to display a USSG or Transport Canada Conformity Label (Decal 8 or 9).

If your Conformity label is missing, please contact your KingFisher dealer with your Hull Identification Number (HIN) for a replacement.

#### Decal 8

The Transport Canada Conformity label is located on the baitwell at the stern

# CANADIAN COMPLIANCE NOTICE

**AVIS DE CONFORMITE CANADIEN** 



WESTWINN GROUP ENTERPRISES INC (QBS)

VERNON B.C. CANADA MODEL / MODELE:

3125 / 3425

THE MANUFACTURER DECLARES THAT THIS VESSEL COMPLIES WITH THE PLEASURE CRAFT CONSTRUCTION REQUIREMENTS OF THE SMALL VESSEL REGULATIONS, AS THEY READ ON THE DAY ON WHICH THE CONSTRUCTION OF THE VESSEL WAS STARTED OR ON THE DAY ON WHICH IT THE VESSEL WAS IMPORTED.

LE FABRICANT ATTESTE QUE CE BÂTIMENT EST CONFORME AUX EXIGENCES DE CONSTRUCTION DES EMBARCATIONS DE PLAISANCE DU RÉGLEMENT SUR LES PETITS BÂTIMENTS, EN VIGUEUR À LA DATE DU DÉBUT DE SA CONSTRUCTION OU À LA DATE DE SON IMPORTATION.

P/N

#### Decal 9

The US Coast Guard Conformity label is located on the baitwell at the stern

## **CONFORMITY LABEL**

3125 / 3425

THIS BOAT COMPLIES WITH U.S. COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION

MANUFACTURER:

**WESTWINN GROUP ENTERPRISES INC** 

VERNON, BC, CANADA

# EXHAUST EMISSIONS HAZARD

#### Decal 10

The Carbon Monoxide (CO) warning decal is located on the rear bait well

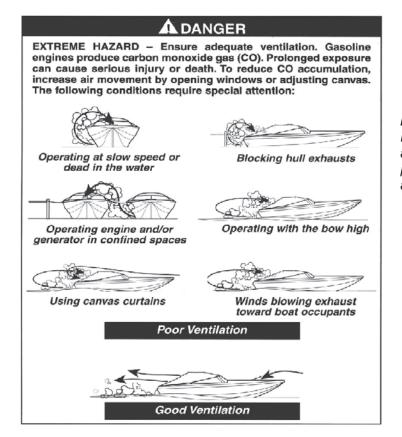
# **⚠** DANGER

Carbon Monoxide Carbon monoxide (CO) is a poisonous gas that is colorless, odorless and about the same weight as air. It will distribute itself throughout spaces of the boat in dangerous concentrations, if proper ventilation is not provided. A person breathing these fumes will become seriously ill. Direct and prolonged exposure will cause brain damage or death. Always run the bilge blower whenever the engine is idling. Opening windows or hatches may improve ventilation.

Enclosed cabins or cockpits may accumulate Carbon Monoxide (CO). This can be a result of fumes from your own engine or from neighboring boats. To prevent CO Poisoning ensure continuous movement of fresh air and do not run the boat fully enclosed. You may wish to install one or more carbon monoxide detectors in the boat's enclosed cabin or cockpit.

CO diffuses in the air much more rapidly than easily detectable gases; you cannot rely on smell to recognize its presence. CO will be produced anytime materials containing carbon are burned. Common sources of CO are internal combustion engines and open flame devices such as cooking ranges, space heaters, and charcoal grills.

# **Ventilation Graphic**



# Symptoms of CO poisoning include, but are not limited to, the following:

- 1. Watering and itchy eyes
- 2. Flushed appearance
- 3. Inattentiveness and the inability to think clearly
- 4. Ringing in the ears
- 5. Tightness in the chest
- 6. Headache and/or throbbing temples
- 7. Drowsiness and fatigue
- 8. Incoherence
- 9. Nausea and/or vomiting
- 10. Dizziness
- 11. Collapse
- 12. Convulsions

**IMPORTANT:** If someone is suffering from CO poisoning move the person to fresh air, administer oxygen, if available, and contact medical help. If the victim is not breathing, perform approved CPR procedures until medical help arrives and takes over.

# SECTION 3 — OPERATOR AND PASSENGER SAFETY

# **BOAT OPERATORS**

The safe use and operation of this boat requires proper operating techniques, common sense, good judgment, and expertise. Operators must know the basics of marine navigation and boat handling. It is vital that operators are capable of safely navigating their vessel while upholding respect for others on the waterway.

It is the operators responsibility to operate the boat safely in accordance with the law, common sense and good judgment. Check with your local governing body to see if an operator license is required in your jurisdiction. The boat operator bears responsibility for the safety of the boat's passengers and others that may be in the immediate vicinity affected by the operation of the boat.

The operator also has a responsibility to operate and maintain the boat and its equipment in accordance with the manufacturer's instructions. Failure to do so may result in damage to the boat or its equipment or void the warranty. Your KingFisher requires standard cleaning and maintenance to ensure many years of enjoyment. See **Section 5** for detailed maintenance requirements and instructions.

The operator is responsible for the safety of all passengers. All passengers must be wearing an approved personal floatation device suitable for their weight. All passengers should be familiar with the location and use of all emergency equipment on board.

As the boat operator, one of your legal responsibilities is to come to the aid of other boaters or persons in the water that are in danger, provided it does not put you or your vessel in danger. Consult the manuals that come with your life saving equipment. When approaching persons in the water approach as slowly as possible. When in the vicinity of persons in the water, turn off your engine and use paddles to maneuver. Your boat is not designed to tow other boats. In an emergency, use your bow or transom eyes for towing purposes. Your deck cleats are not designed for towing and can fracture suddenly or pull out of the deck. Towing another vessel at speeds above 5 mph will put an unusually heavy load on your motor, possibly resulting in mechanical damage not covered under engine warranty.

Everyone who operates the boat must read this manual to gain a better understanding of KingFisher Boats components, best handling practices and to understand their responsibilities.

# SAFE BOATING PRACTICES

Marine safety is of the utmost importance to keep yourself, your passengers and other boaters safe. The below tips are common sense and must be followed. Negligence can result in severe injury or death.

- Approved personal floatation devices of the correct size must be worn at all times by persons aboard the boat while it is in the water.
- Turn off the engines while any passengers are entering or leaving the water, or anyone is swimming in the vicinity of the boat.
- Always operate your boat at a safe speed for weather conditions. Slow down during periods of restricted visibility, choppy water and high winds.
- Do not operate the boat if any object is obstructing the line of sight forward of the steering station.
- Gasoline vapors are explosive. Be careful when fueling to avoid spillage in the boat or water.
   Extinguish all smoking material and open flame while refueling or while within 15m of a refueling site. Avoid static electricity discharges and do not operate a cell phone while fueling.
- Check for water or gasoline in the bilge. If there is gasoline in the bilge, evacuate everyone from the immediate area and contact your local fire department. Never use the bilge pump to pump out even a tiny amount of gasoline or oil from the bilge.
- Never sit on seat backs, gunnels or arm rest, and never stand on seats.

- Never consume alcohol and/or recreational drugs during or prior to operating any vessel.
- Never attempt to modify your vessel's hull or structure without explicit instructions from the manufacturer or your dealership. Doing so may result in catastrophic structural failure that could cause severe injury or death. Modifying your hull will void the warranty.
- Your boat will always turn more aggressively the faster that you are going. Always be aware of your surroundings and give yourself lots of room to maneuver safely.
- In the event of engine failure, check all electrical, mechanical and plumbing connections to the engine.
   Ensure that there is sufficient fuel in the tank, and that there has been no fuel or oil leakage. Attempt to restart the engine in accordance with the manufacturer's instructions. If the motor will not start wait for it to cool down and try again. If the motor will not start after several attempts, summon assistance.
- In the event of fire, use your fire extinguisher in accordance with its instructions. All other persons should abandon the boat immediately in the event of fire if it is safe to do so. In the event of loss of steering, throttle or shift control system failure, turn off the engine and summon assistance. Use the paddles to make your way back to shore.



- DELIBERATE MISUSE OF YOUR BOAT AND EQUIPMENT CAN VOID YOUR WARRANTIES AND POTENTIALLY RESULT IN SERIOUS INJURY OR DEATH
- FAILURE TO COMPLY WITH NAVIGATIONAL REGULATIONS AND RESTRICTIONS COULD RESULT IN FINES, SEVERE INJURY OR DEATH

# SECTION 4 - BOAT CHARACTERISTICS AND OPERATION

# **GETTING TO KNOW YOUR BOAT**

Read the owners manual for all of your installed components completely. Locate your circuit breakers, switches and the location of in-line fuses for the bilge pumps and other accessories. Use the various component owner's manuals provided with your boat to learn where your check points are located, and what acceptable levels and conditions are at each point. Get to know where your shut-offs are for power, seawater, and fuel.

Once you are familiar with the components of your boat, it's time to head to the water. Take it easy for the first little while until you know how your boat responds to the throttle, turning and encountering waves. The transition zone between plaining and displacement speeds can be abrupt at times. Also, a boat's sensitivity to steering, wave impact and even wind at high speed can be unpredictable, because there is very little of the boat in contact with the water's surface to provide stability and control. Practice docking your boat carefully a few times to get the feel of your boat.

#### **Fuel and Oil**

Consult your engine manufacturer's owner's manual for the proper type of fuel to use and any appropriate additives. Understand the difference between 2-stroke and 4-stroke and know what engines your boat is equipped with. Your 4-stroke engine may either have a wet-sump oil system which means that it has an oil filled crank case, or a dry-sump oil system which means it has an oil tank. If equipped, your 2-stroke will have an oil tank on board under the deck with a deck fill, or directly on the engine itself. Never ignore low oil warnings and always ensure you have sufficient oil on board. In either case always check your oil before starting the motor. Consult your engine owner's manual for the location of your dipstick, the procedure for checking the oil level, and the correct type of oil to use.

Avoid filling your boat's fuel tank to its full capacity and never park your boat with a completely full fuel tank. Fuel expands when the surrounding air temperature increases. This can cause your fuel system to overflow. Spilled fuel creates a fire and explosion hazard, can cause severe irritation to skin and can damage the paint on your boat. Paint damage due to spilled fuel is not covered by your warranty.

# **Engine Trim**

You can change the angle of the propeller shaft by adjusting the trim switch. Start from idle with the outboard tucked in/down all the way. While accelerating and planing, start to trim the outboard out/up. By trimming the outboard out/up, you will raise the bow of the boat. By doing this, it reduces drag and bow steering and increases speed and fuel economy. Find where your boat has optimal performance. Over trimming will reduce performance and could potentially damage your engine by cavitation.

#### **Steering and Controls**

Your boat is equipped with hydraulic or powered hydraulic steering. The fluid level must be checked frequently to ensure that the hydraulic system is intact and that there is sufficient fluid in the lines for your steering system to function correctly. It is very important to use the manufacturer's recommended steering oil type. The oil type can be found in the applicable steering manufactures owner's manual. The steering should only be adjusted by a qualified technician.

Consult your engine and control owner's manuals for instructions on operating your boats throttle and shift controls. Marine engines can only be started with the controls in the "Neutral" position. Always shift your controls to "Neutral" before starting the motor. If you are able to start your engine with the shifter in gear have your Kingfisher dealer service the boat immediately to correct the problem.

Your vessel will also be equipped with a safety lanyard. The lanyard consists of a clip attached to your boat's engine controls and a snap-hook that attaches to the operator's clothing. If the operator is ejected from the boat or collapses, the lanyard pulls the clip from the controls and shuts off the engine. Before starting the engine ensure that this lanyard is in place and the clip fits snugly into its receptacle. For other engine starting instructions consult your owner's manuals.

# **Instruments and Gauges**

Your boat will likely be equipped with an engine manufactures multi-function display. These gauges are capable of providing the operator with a comprehensive list of engine data and operating information such as: voltage, trim status, boat speed, steering angle, fuel level, oil, water, engine RPM and engine diagnostic alerts. Always be aware of your gauge reading. Low RPM's can mean a fouled prop. For full break down of capabilities related to your gauge, see the manufacturer's owner's manual. Stay current with corresponding software updates for your display. Contact your Kingfisher Dealer for more information.

# SAFE OPERATION, CARE AND ATTENTION

Operating your boat with due care and attention requires the operator be aware of the surrounding environment at all times.

- Sudden stop or change of direction can cause loss of control of the boat resulting in injury or death.
- Operate the boat defensively at all speeds and keep a safe distance from people, objects and other watercraft.
- Following directly behind other boats or operating the boat in an erratic manner can lead to collision, injury and death.
- Operators should reduce speed and exercise extreme caution when operating the boat in shallow areas or where there might be submerged objects.
- Be aware of the weather conditions at all times. If wind and waves begin to rise or visibility begins to deteriorate, return to the dock or boat ramp.
- Placing heavy objects over to one side of the boat or very far forward in your boat can result in poor boat performance, or in an extreme situation result in loss of control or capsizing of the boat. Always distribute any cargo evenly around the center of the passenger carrying area of your boat.

# OPERATING TIPS

# Launching

When you arrive at the boat ramp remove the rear tiedowns from your boat and perform all pre-operation checks. Ensure the drain plug is in place. When safe to do so, back your trailer slowly down the ramp until the underside of the boat is touching the water. Stop your vehicle and set the parking brake. Disconnect the trailer safety chain from your boat and let out a few feet of winch line. Ensure you do not let out enough winch line to become tangled on your vehicle or the trailer. Back your trailer down the ramp until the boat is ready to float free. Set your parking brake. Disconnect your winch line from the boat and attach a long mooring line to the bow. Guide your boat off of the trailer and secure it to the shore using the mooring line or have someone on shore hold the line. Park your trailer and vehicle. Board your boat. Ensure that there is enough water under your boat before lowering the motor.

#### Loading

Tilt your outboard motor into the traveling position. Moor your boat on shore or have someone on shore hold the mooring line. Carefully back your trailer down the ramp when safe to do so until the trailer bunks are just underwater. Set your parking brake. Guide your boat onto the trailer as squarely between the trailer fenders as possible. Attach the trailer winch line to the bow eye of the boat, detach the mooring line and winch the boat the remainder of the way onto the trailer. Attach the safety chain to the bow eye of the boat. Remove your boat from the water and perform all post operation checks prior to leaving the parking lot. Attach the tie downs to the transom, stow all loose items securely and store the boats fabric top in the down position. Perform all trailer checks.

#### **Starting your Engine**

Consult your engine and control owner's manuals for proper engine starting, break-in, and shut-down procedures.

# **Boarding the Boat**

Never attempt to board a boat while the engine is running, whether from the water or from the shore or dock. When boarding from a dock or the shore, ensure that the boat is secured so that it cannot move away from you while you are boarding. Use a step if necessary to board comfortably. When boarding from the water, use the transom platform and ladder if so equipped.

## **Stopping**

We recommend that operators avoid stopping the boat abruptly because the boats wake can catch up with the boat and lift the rear of the boat suddenly. Slow the boat down gradually prior to stopping, and never use reverse gear as a brake.

# **Docking**

Always enter marinas and dock areas at low speed ~ 5mph (8km/h) or as posted. Approach the dock head-on, turning the steering wheel sharply as you come closer to the dock, bringing the side of the boat you wish to dock on around to face the dock. Put the boat into reverse gear and turn the wheel or tiller in the opposite direction to pull the stern towards the dock, and then put the boat in "Neutral". The boat should drift sideways, gently towards the dock. Practice this often, carefully and at low speeds. Take advantage of any assistance you may be offered when docking.

# Leaving a Dock

When leaving a dock, check for traffic and start the engine in neutral. Then have a passenger or someone on shore untie the boat and push the boat away from the dock. Once the boat is clear of the dock by approximately 1m (3 ft) and is clear of any obstructions or other boats, put the boat in gear and proceed with caution at the slowest throttle setting until the boat is into open water.

#### **Beaching**

When beaching the boat, it is critical that the motor be turned off and the motor or leg tilted up so that the propeller does not strike sand or rocks on the beach. When approaching the shore for beaching, slow the boat down so that a sudden stop will not cause jarring to the passengers or damage to the boat. As you approach the beach and the water becomes shallower turn the motor off, tilt the drive up fully, and drift onto the beach. Once on the beach secure the boat to a fixed object on shore.

Take care in tidal waters that the boat is not beached long enough for the tide to come in and carry your boat away, or for the tide to go out and leave your boat stranded.

When you're ready to leave the beach, have your passengers board the boat, untie your boat from shore, and push it into the water. Do not lower the outboard until there is sufficient water to avoid engine damage. Hull damage as a result of beaching is not covered under warranty.

# **Night Operation and Anchoring**

Your boat is equipped with navigation lights which must be turned on from dusk till dawn. The anchor or "all-round" light must be displayed while at anchor during the night in any area that experiences marine traffic. Never operate your boat after dusk if the navigation and anchor lights are not functioning properly.

#### **Auxiliary Engine Operation**

When operating the vessel under the main engine power, always have the auxiliary motor tilted out of the water. Engine damage may occur if the auxiliary engine is in the water while in planning speeds.

# POST OPERATION CHECKLIST

After you are finished enjoying your boat for the day return to the dock or boat ramp and turn your motor off
Check propeller or impellor for nicks and tangled debris
Check the bilge for gasoline and water
Remove garbage from the boat
Tilt the outboard and trolling motor to the secure traveling position
Secure all loose items prior to trailering
Wash the boat down with fresh water and pull the hull's drain plugs to remove any water from the boat, securely replacing them afterwards
Consult your engine owner's manual for special instructions on purging water from your boat's exhaust system and flushing your boat's cooling system
Perform any post operation maintenance specified in your engine owner's manual

# TRAILERING YOUR BOAT

Please defer to your state or provincial regulations for towing and licensing requirements.

# **Gross Vehicle Weight Rating (GVWR)**

Take careful consideration of the GVWR. Locate the decal with the GVWR information. It is usually found on the frame near the tongue of the trailer. The boat, engine(s), fuel, water and your boats accessories and gear should never exceed this rating.

# **Trailer Setup**

Setting up the correct trailer fit for your boat and vehicle is very important. An improper trailer setup can do cosmetic as well as visible and unseen structural damage to your boat. KingFisher strongly recommends having a technician from an authorized Kingfisher dealership ensure your trailer is properly set up. Damage due to trailering is not covered under warranty.

Before trailering your boat, become familiar with how your vehicle handles while towing a trailer. Practice making turns and get to know the turning clearance that you will require while towing. Practice backing up with your trailer and get to know how quickly your trailer will respond to small movements of your steering wheel. An empty parking lot is an excellent place to practice.

Handling of the boat on and off the trailer as well as towing a trailer should never be attempted on a trial and error basis. If you are a novice boater or have not been boating in a while, please ask your dealer to show you the proper handling of the boat on and off the trailer. Use special care for boats equipped with bow pulpits and anchor systems.



Improper trailering may cause irreparable damage to your boat. If you are unsure about how to properly secure your boat, please contact your authorized Kingfisher dealer.

# TRAILER CHECKLIST

Before towing your boat complete the below checklist:

- Refer to local and regional laws to ensure that your trailer complies with regulations
- Read the trailer manufacturer's owner's manual
- ☐ Check the trailer hitch on your vehicle and make sure that it is the correct size and load rating for the trailer you are towing
- ☐ Check for correct function of the trailer braking system
- Secure the bow of the boat to the trailer with the winch line and safety chain
- ☐ Tie down straps should be attached from the eyehooks in the transom to the rear of the trailer
- ☐ Attach the trailer's break-away chains to your vehicle. Properly secured chains cross over each other
- ☐ Secure the trailer tongue over the hitch on your vehicle using the release handle and locking pin on the trailer
- Tongue jack is in the full upright position
- ☐ Trailer electrical harness is plugged in and brake lights, turning indicators, side markers and parking lights are functional
- ☐ The boat should be level and sit squarely on the trailer
- When trailered correctly, the aft end of the bottom of the hull should line up as close as possible with the end of the trailer bunks
- ☐ Check the trailer for any loose fasteners, corrosion or damage
- ☐ Check the tires for proper inflation and wear
- ☐ Check your trailer wheel hubs periodically during your trip to ensure that they are not overheating

For trailer maintenance parts and warranty information, please refer to the trailer manufacturer's owner's manual.

# SECTION 5 — MAINTENANCE AND CARE

# **EXTERIOR MAINTENANCE**

KIngFisher uses marine grade products and takes extra caution during installation to ensure the longevity of your boat. However, after each voyage there is a need to thoroughly clean your vessel to minimize electrolytic action (galvanic corrosion). In addition to instructions found elsewhere in this manual and in literature specific to certain components, the following information is provided for general maintenance and repair. Because conditions vary widely in different areas and the frequency and type of use can differ greatly between owners, intervals for maintenance are not listed here.

#### Sacrificial Anodes

Sacrificial anodes are a highly active alloy material used to prevent less active alloys from corroding. Your Kingfisher hull is fitted with four 2.5lbs aluminium sacrificial bar anodes bolted to the stern of the boat. The boat's motor(s) will also be fitted with several sacrificial anodes. Careful inspection and replacement of worn anodes are essential to keep the hull in the best condition possible. Good practice is to change the anodes if they deteriorate by 40-50%. Failure to replace a worn anode will result in hull damage and will void your warranty. See your authorized Kingfisher dealer for sacrificial anode replacement information.

#### Cleaning

Wash your boat with soap and fresh water the way you would wash a car. Power washing at more than 1000psi may cause paint to delaminate. Pull the hull drains if practical and allow the boat to dry thoroughly. Clean all surfaces and apply a coat of automotive or marine grade wax protectant two to three times annually to protect your painted finish from the elements, and to seal the metal where any paint scratches may have occurred. Rinse with fresh water after every salt water use. Always spot test new cleaners and waxes before using. Marine growth, barnacles and other debris deposits should be removed from the hull prior to storage. Never use a metal brush of any kind on the exterior surface of your boat. Do not use abrasive or non-biodegradable solvents. Do not discharge chemicals overboard. Regular periodic maintenance will maintain the overall appearance of your boat.

# **Paint Touch Ups**

For small scratches that need repainting, clean the area to be painted of wax, grease and dirt. Apply the touch up paint. When the paint is dry, (at least 24 hours) polish the area with an automotive cutting wax compound.

For larger scratches that need repainting, please see your authorized Kingfisher dealer or an automotive body shop.

#### **Oxidization and Corrosion**

The high electrically conductive nature of salt water intensifies corrosive action on aluminum. The hostility of the marine environment affects most materials - metals, wood, plastic, fibreglass, etc.

KingFisher hulls are manufactured with marine grade aluminum alloys such as 5086 - H32 and 5052 - H32. Marine grade aluminum alloys produce a natural protective film either a whitish or darker surface layer - when exposed to oxygen or water. Although extremely thin, (approx. 5 to 10 millionths of a millimeter), this oxide film forms a corrosive-resistant barrier. Experience shows that large and small vessels constructed of these alloys can stay in constant saltwater service for decades as long as proper care is taken.

Avoid dissimilar metals coming in contact with aluminum surfaces (e.g. all ferrous metals including steel, brass, or copper fittings). If there is a need to attach fittings made of a dissimilar metal make sure that a non-wicking gasket or sealant is placed between the fitting and the boat hull. If the hull is drilled for any reason, a sealant such as a marine grade silicone should be used as a barrier between the hull and components. See the **corrosion manual** for more information.

#### Warranty does not apply to:

Corrosion or damage resulting from fuel overfilling, the use or storage of harmful solvents or cleaners, electrolysis caused by reversed polarity connections or inadequate galvanic isolation, improper use of anti-fouling paint, or dissimilar metals and saltwater exposure. Salt water corrosion damage resulting from absence of zinc anodes, cathodic protection devices, improper or unattended storage or moorage.

# COMMON TYPES OF CORROSION

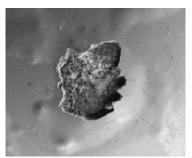
## **Galvanic Corrosion**

Common type of corrosion caused by dissimilar metals. This can occur for a variety of reasons including dissimilar fittings and fasteners in direct contact with bare aluminum; or even loose items like sinkers and old hooks that find their way into the bilge or an inconspicuous area. These dissimilar metals cause galvanic corrosion when immersed together or while in contact with saltwater, brackish or even contaminated freshwater.



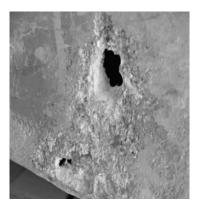
## **Crevice Corrosion**

Lack of oxygen can be another reason why aluminum corrodes. Standing saltwater, brackish, and even contaminated freshwater sitting in the hull of your boat over a long period of time can cause tiny areas where the oxide layer slowly gets deteriorated. Not having that natural hard protective coating of oxide will cause the aluminum to become pitted over time and could potentially evolve into microscopic pinholes through the hull.



# **Electrolysis Corrosion**

When an electrical component in either the AC or DC system is incorrectly installed or has an electrical fault which leads to ground. This fault doesn't necessarily need to be on your vessel to cause an issue. It could be located on a neighboring vessel or a boat on the other side of the marina connected to the same AC grounding bus on the marina supplied shore power connection. These faults will turn your boat and every other boat in the marina into a battery, with the saltwater as the conducting electrolyte.



#### **Poultice Corrosion**

Accumulation of debris can create a highly corrosive condition. Combined with aluminum, this debris creates an acidic solution called aluminum hydroxide that can corrode through the parent metal. These areas tend to seriously aggravate aluminum when there is wet-dry cycling.



# **Identifying and Managing Corrosion**

After every voyage you must pay special attention to the overall cleanliness of your vessel. No different than storing your gear and hanging items to dry, there is a need to clean off the saltwater that has come into contact with your vessel during your outing. A thorough freshwater wash down is an effective way to reduce the risk of corrosion, which could require extra maintenance in the future. Places like under your cutting board, aft helm, and nylon downrigger mounts are examples of points of contact that aren't meant to be watertight and should always be well rinsed with fresh clean water after every use. For best results, an initial quick heavy mist well help loosen the dried salt crystals. Follow this up with a heavy rinse working from the top down, putting extra spray into areas with tight contact points that have little chance of drying up quickly on their own.

Bilge compartments must also be kept as clean as possible by flushing with fresh water every time you return to dock. Make sure all internal drain-ways are free from scum build-up and loose debris. If you notice a white powder forming in crevasses it's a sign this area has been overlooked in previous cleaning attempts. Clean this powder with a stainless tooth brush so the aluminum can once again form a new oxide layer. This type of corrosion will require immediate attention to stop further growth and should not be delayed.

Chipped paint from stones while trailering, or a scratch from a loose deck board, will also have a negative effect when in contact with saltwater. Exposed aluminum in your paint finish will allow moisture in between the paint and hull. This will cause paint to blister and peel. It is important to seal any exposed areas to prevent corrosion forming and spreading.

Blistering and peeling paint around fasteners and fittings or chalky white powder is a sign that galvanic corrosion may be taking place. These are areas not properly rinsed from previous trips or areas where movement of a loosened fastener has allowed water to enter and make contact between the stainless fastener and bare aluminum. This component must be removed and the corrosion must be eliminated by light sanding at a minimum. The affected area will then need to be recoated with matching paint. The component should then be reinstalled using the "New Component Installation Instruction" sheet.

#### **Sacrificial Anodes and Galvanic Protection**

Depending on which model and options you have selected your boat may be equipped with sacrificial anodes and a galvanic protection device.

A galvanic isolator is present on all models equipped with a minimum 30A shore power system and is installed just after the vessel's shore power connection. Signals can pass through this galvanically isolated circuit, but stray currents such as differences in ground potential or currents induced by AC and DC power are blocked.

Sacrificial anodes on your vessel are part of your cathodic protection system. The anode is made from a metal alloy with a more "active" voltage than the surrounding metal it is protecting. The difference in potential between these two metals means that the sacrificial anode material corrodes in preference to the surrounding area it is protecting.

Anodes do require maintenance to keep them at their peak effectiveness. Repeated cleanings throughout the season with a wire brush may be required to remove any buildup that may form.

The anodes on your vessel should be inspected and cleaned every two months. You should change your anodes after it has corroded to half its original size or when you've accumulated twelve months of immersion in saltwater. When anodes are cleaned or replaced, it must also be verified that they have good continuity with the hull. This is an easy step by using a multi-meter set to the ohms scale.





New Sacrificial Anode

Anode Needing Replacement

# NEW COMPONENT INSTALLATION INSTRUCTION

If a fixture or addition to your boat becomes loose, it increases the risk of exposure. Check your fixtures regularly. To safely and effectively install or replace components, follow the below instructions.



1. Place component and hole the markings with a pen



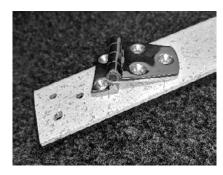
5. Center the component over pre-drilled holes



2. Ensure there are no obstructions on the back side of your mounting location before drilling.



6. Heavily coat all fasteners that will be used to hold the component in place.



3. Drill and deburr holes. Clean up all metal chips and shavings so that none will get trapped in your newly installed component



7. There should be no visible gaps in the sealant when the component is tightened down.



4. Apply a generous amount of sealant such as Sikaflux 291. Loctite UR 3370 or 3M 5200



8. A soapy water solution can be used to clean up the remaining excess sealant.

# INTERIOR MAINTENANCE

# **Cabinets and Countertops**

Laminate countertops are offered on all Kingfisher models. To keep the sapelli wood cabinets and laminate countertops in optimum condition, clean the cabinet as with a lint-free cloth slightly dampened with water and soap. Dry immediately with a lint-free cloth. Avoid using abrasive pads or powdered cleansers as these products may scratch and penetrate the surface, allowing moisture to enter and cause deterioration of the finish. Keep the surface dry by wiping up spills and water marks as they occur.

# **Vinyl Floor Coverings**

Remove ordinary dirt and smudges with a mild soap and water solution and a clean soft cloth or towel. Dry with a soft lint-free cloth or towel. Do not use abrasive powder, steel wool, or industrial strength or solvent cleaners. The use of upholstery "conditioners" or "protectants" is not recommended and should be avoided on all vinyl coated fabrics. For tough stains, Formula 409 All-Purpose Spray Cleaner or Fantastik Spray Cleaner is recommended by the vinyl manufacturer.

# **Kingleather Upholstery**

The vinyl seats can be routinely washed with a soapy water solution. For tough stains, use Spray Nine. Protect the seat coverings with a 303 protectant.

# MAINTENANCE AND ADJUSTMENTS

# **Periodic Inspection Checklist**

Check entire fuel system for leaks
Check all engine mount fasteners for tightness
Check all deck fasteners for tightness
Inspect hull and motor mounts for cracks and other signs of fatigue such as deep scuffing
Check drain plug
Check bilge for oil, water and gasoline
Check steering lines for wear and ease of function
Check oil level in engine and power steering pump
Test battery and check for damage or corrosio.
Test all switches, lights, horn, and accessories
Check for burnt out lights
Check seat fasteners and swivels for tightness and wear
Inspect zinc hull anode and replace if required
Confirm proper operation of galvanic isolator. See page 30 of this manual

# **Inspecting the Fuel System**

The fuel system can be accessed through removable panels in the transom and in the deck. Remove the panels and check the fill fitting, the tank fittings and the vent lines at the filler cap and at the tank for signs of leakage. Also check the hoses and primer bulb (if equipped) for signs of wear, chafing and other deterioration. Replace any damaged fuel hoses immediately. Check the fuel filters. Change the filters once a season or after every 100hrs of operation.

# Inspecting the Steering

Your boat will come with an owner's manual for the type of steering system that your boat is equipped with. Refer to this manual for information on proper maintenance. Never operate your boat with a damaged or improperly functioning steering system. Confirm that the hydraulic reservoir is full, and check all hoses and connections are leak-free and that the fluid isn't contaminated.

## **Inspecting the Circuit-Breakers and Fuses**

Your boat is equipped mainly with resettable circuit breakers. These will pop out if overloaded and can be pushed back in with a fingertip to reset them. There is an in-line grey 50A circuit breaker coming off the main battery lead to your distribution panel. Inspect the fuses and the electrical system of your boat monthly. You can also find a panel of fuses under the main helm. Shut off the main electrical switch by your battery (or disconnect the battery) and inspect the accessories. Trace the circuits and inspect them for chafing and for broken or damaged wires, plugs, switches or connectors. Never bypass a fuse or circuit breaker. If you are unable to find the cause of the blown circuit, have your boat serviced by your Kingfisher dealer.

# **Servicing Under the Deck**

Access to the bilge and fuel tank is gained by removing all the sidewalk screws and lifting the rear deck off.

# **Transducer Mounting Plates**

Transducer brackets are a standard design feature. They are intended to reduce the need to drill holes directly into the hull below the water line. The plates are located at the base of the transom, where the hull meets the rear of the boat. Simply attach your transducer(s) directly to this plate on the transom. Do not drill holes for routing cables below the water line. Extreme caution must be used when installing this type of transducer to avoid leakage and potential injury or death.



GASOLINE VAPORS CAN EXPLODE IF IGNITED, CAUSING SERIOUS INJURY OR DEATH. INSPECT FUEL SYSTEM FOR LEAKS REGULARLY.

# STORAGE AND WINTERIZING

KingFisher recommends your boat be winterized by an authorized dealer. Your boat should be stored in a covered, well ventilated area to prevent fungus, mold and mildew. It is best to store it with a breathable cover over it to prevent corrosion and staining promoted by leaves, tree sap and other debris, and to prevent rainwater from accumulating inside the boat.

# **Engine**

Refer to engine manufacturer's owner's manual for information and instructions on preparing your engine(s) for winter storage.

# **Fuel System**

Top off the fuel tank with fresh fuel to approximately 7/8 full, adding a fuel conditioner and stabilizer. Consult your Kingfisher dealer for fuel conditioner and stabilizer purchase information). A 7/8 full fuel tank is less likely to develop condensation, reducing the risk of contaminating the fuel. This will also prevent the fuel from expanding and running out of the fuel vent hose. Running treated fuel through the engine during the engine winterization process will also help protect the fuel system.

**NOTE**: The use of fuel conditioner and stabilizer eliminates the need to drain the fuel system. Consult your dealer if you prefer to drain the fuel system.

Always store your boat in a well ventilated area. Unlike a car, your boat is not equipped with a vapour-tight fuel tank.

#### **Batteries**

The battery(s) should be removed for winter storage. Batteries can suffer permanent damage as a result of excessive or prolonged periods of discharge. Use terminal paste to prevent corrosion on the battery terminals and clamps.

- 1. Turn off the battery switch(es) and remove the battery(s).
- 2. Inspect each battery for cracks or leakage and ensure the battery terminals are free from corrosion and dirt. Clean the battery's casing and terminals with a mixture of baking soda and water (one tbsp of baking soda to one-cup water). Apply dielectric grease or petroleum jelly to the battery terminals and to all exposed connectors.
- 3. If the battery is to be stored for a long period of time, store the battery in a cool, dark place. Check the specific gravity of the battery fluid at least once a month and recharge if the battery gets too low. Specific Gravity: 1.28 at 68 degrees F. Sparks, cigarettes and open flame can lead to a hydrogen explosion. Your battery should be kept fully charged at all times.

#### **Drain Plug**

Always remove the drain plug from the boat when storing it for long periods of time. This will ensure that any water that has collected in the bilge will drain. When storing the boat the bow should be slightly higher than the stern, this will help excess bilge water to drain fully. Inspect the drain plug when re installing it and replace it if necessary.

#### Fresh Water System

Drain fresh water and grey water holding tanks. Once tanks have been drained, add RV anti-freeze and ensure that it is circulate throughout complete water system. Ensure that all fresh water has been flushed from all faucets and pumps and that antifreeze is present in all of the water lines.

Ensure that hot water system is drained, flushed and winterized with R.V. anti-freeze.

#### **Trailer**

We recommend your trailer be winterized by an authorized Kingfisher dealer or by a qualified technician. The trailer frame should be washed and internally flushed if used in salt water. Wheel bearings and breaking system can be permanently damaged if not properly winterized and free of all water.



BATTERIES CAN PRODUCE EXPLOSIVE HYDROGEN GAS. BATTERY EXPLOSION CAN LEAD TO BURNS, INJURY AND DEATH ALWAYS SERVICE BATTERIES IN A WELL VENTILATED AREA KEEP AWAY FROM SPARK AND OPEN FLAME

# RE-COMMISSIONING BOAT AFTER STORAGE

# **Engine**

Refer to the engine operator's manual for detailed information on re-starting after winter storage.

#### **Batteries Checklist**

- ☐ Terminal posts clean with wire brush or steel wool
- ☐ Cable clamps attach positive (+) cable first, then negative (-) cable
- □ Wiring inspect for deterioration and service or replace as required

# **Steering System**

Have steering system checked by and an authorized Kingfisher dealer.

# **Fuel System**

Inspect for fuel in the bilge, loose connections, worn hoses, and leaks.

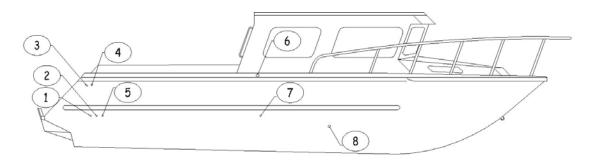
#### **Miscellaneous Items Checklist:**

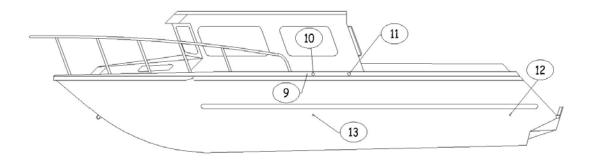
- ☐ Through hull fittings Check to ensure water passage is unobstructed and hoses and fittings are serviceable
- Navigation lights Check for proper operation
- ☐ Bilge pumps Check all pumps and float switches for correct operation
- ☐ Wiring Check for loose connections
- ☐ Switches Check for proper operation of all equipment and components
- ☐ Bilge blowers Check for proper operation; turn blowers on and place hand over hull blower vent to make sure air is exiting from vent
- □ Anchor lines and gear Inspect and replace if necessary
- ☐ Hull drain plugs Installed
- Bilge Clean thoroughly
- □ Engine fluids Check for proper levels as described in the manufacturer's owner's manual

#### Trailer:

Refer to the trailer manufacturer's owner's manual for re-commissioning of the trailer after storage.

# **SECTION 6 — SYSTEM AND OPTIONS**





# THRU HULL LOCATION

- 1. Baitwell drain
- 2. Fish box macerator discharge
- 3. Main bilge pump discharge
- 4. Secondary bilge pump discharge
- 5. Livewell drain
- 6. Fresh water deckfill
- 7. Cabin bilge pump discharge
- 8. Sink drain
- 9. Grey water tank vent
- 10. Grey water pump out
- 11. Fuel fill
- 12. Starboard side fish box macerator
- 13. Grey water overboard discharge

Note: Thru hull location may vary due to individual options selected.

#### **IMPORTANT**

Check with the Coast Guard and local authorities prior to discharging grey water overboard.

# **SYSTEMS**

Before operating your boat, become familiar with all controls. Consult your authorized KingFisher dealer about any controls or functions that you do not understand.

#### Bilge Drain

The bilge drain is located at the lowest part of the bilge at the stern of the boat. When draining the bilge or storing the boat for longer periods of time, the drain plug should be removed. When replacing the drain plug it is advised that a small amount of marine sealant be applied to the threads before the plug is installed.

# **Steering System**

The steering system requires checking each time that the boat is taken out on the water.

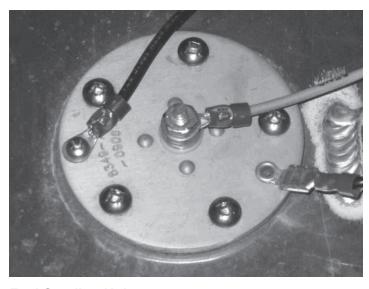
- Check to ensure that the steering system operates correctly and smoothly prior to each trip out on the water.
- Poor or erratic steering may be a sign that the oil level is low, or that fluid or air is leaking out of or into the system. Leaks can occur in the steering hoses, the cylinder, or at connection points. Do not attempt to operate your boat if you suspect a steering system problem.
- Consult an authorized KingFisher dealer if the steering system is not functioning correctly. Only a qualified technician should adjust steering systems. Ensure that the steering system is lubricated at the beginning of the boating season and properly winterized at the end of the season.

# **FUEL SYSTEM**

When filling the gas tank care should be taken not to spill fuel onto the paint of your boat. Any fuel that may be spilled on the paint should be immediately wiped off. Keep tanks approximately 7/8" full during boating season to avoid condensation and fuel expansion. You may wish to have a fuel separator installed to prevent water from entering the engine(s).

If the fuel tank needs to be cleaned or water is found in the fuel system, refer the boat to an authorized Kingfisher dealer

For recommended fuel please refer to your Engine Manufacturer's owner's handbook.



# **Fuel Sending Unit**

The fuel sending unit is a mechanical device that is located in the fuel tank. It sends a signal to the fuel gauge monitoring the amount of fuel that is present in the tank.

**NOTE:** The fuel sending unit will only give an accurate reading when the boat's fuel tank is level. Do not depend on the fuel gauge as your only means of determining fuel levels.

#### **Fuel Leak Check**

Before operating the boat, check the fuel system for leaks. Open the bilge doors and visually check all fuel hoses, vent hoses, fittings, and the tank for leaks. If no leaks are found, carry on with your pre-operation inspection.

If a leak is found or strong gasoline odor is detected, **DO NOT START THE ENGINE**. Consult an authorized Kingfisher dealer.



## **Kicker Motor Fuel Quick Disconnect**

A quick disconnect option is offered for the kicker fuel supply line. The quick disconnect is located on the starboard side of the transom.

The quick disconnect allows the fuel supply line to the kicker to be easily detached from the transom bulkhead. To do this, grasp the fitting located at the transom end of the kicker fuel supply hose and pull back firmly on the fittings collar.

The safety fuel shut off valve is clearly labeled and located behind the rear bilge doors around where the fuel filters reside.

When the kicker is not in use, always turn off the fuel supply shut off valve and tilt the engine up and out of the water.

# Re-fueling the Boat

- Do not smoke when refueling.
   Keep away from all other ignition sources.
- · Stop engine and turn off ignition.
- Refuel in a well-ventilated area. If the boat is in the
  water, be sure it is securely moored prior to refueling.
  Avoid overfilling the tank as fuel expansion may result
  in a fuel spill. Gasoline spilled directly on the hull paint
  of your boat may result in paint damage that will not
  be covered by warranty.
- All passengers must be out of the boat during refueling.
- Open the gas cap and begin refueling.
   Refer to hull plan for location of gas cap.
- When tank is filled to the appropriate level, replace the gas cap.

# **Engine Oil and Fluid Levels**

Engine oil and fuel levels specific to your engine model can be found in the engine manufacturers owner's manual.

For engine oil and other engine fluid levels, consult the engine manufacturer's owner's manual.

For easy reference please mark down the engine manufacturer's recommended oil specifications here:

Main Engine(s) Crankcase Oil:
Main Engine(s) Gearcase Oil:
Main Engine(s) Power Trim Oil:
Kicker Motor Crankcase Oil:
Kicker Motor Gearcase Oil:
Kicker Motor Power Trim Oil:

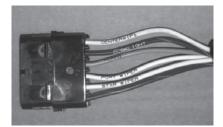


IF GASOLINE SPILLS ONTO YOUR SKIN, IMMEDIATELY WASH WITH SOAP AND WATER. CHANGE CLOTHING IF SATURATED WITH GASOLINE. IF GASOLINE GETS INTO YOUR EYES OR FUMES ARE INHALED, SEEK MEDICAL ATTENTION. IF GASOLINE IS SWALLOWED, CONTACT A POISON CONTROL CENTER AND SEEK IMMEDIATE MEDICAL ATTENTION.

# **ELECTRICAL SYSTEM**

# KingFisher Wiring Harness



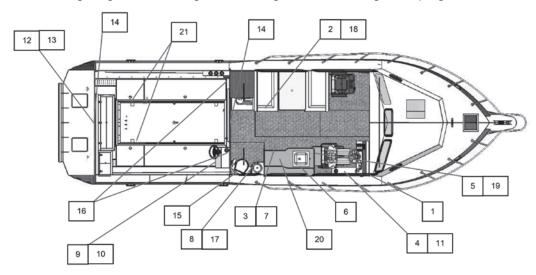


KingFisher's standard main wiring harness has been spliced and fitted with female weather proof plugs for each option offered.

If a boat has not been factory installed with a specific KingFisher option, the wiring harness may still have been spliced and plugged to provide a connecter to accommodate the installation of that option after the boat has left the factory.

#### 3425 Diagram

The following diagrams shows general wiring harness routings and plug locations for standard and optional features:

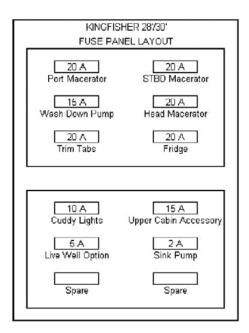


- 1. Fuse panel and ground block
- 2. AC panel (option)
- 3. DC fridge switch
- Galvanic isolator (in wall)
- 5. Carbon monoxide (CO) detector
- Faucet
- 7. Fridge
- Toilet macerator switch
- 9. Washdown switch & fishbox switch
- 10. Fishbox macerator switch (28/30 only), livewell switch (option)
- 11. Remote battery controller

- 12. Remote battery switches
- 13. Main fuse and bilge fuse(s)
- 14. Bilge pumps
- Head stall light
- 16. Deck lights
- 17. Shower sump (under deck) (option)
- 18. Invertor Controller (option)
- 19. Power invertor (under deck) (option)
- 20. Cook top (option)
- 21. Fishbox macerator pumps

#### **Fuse Panel**

A fuse panel label is located underneath the dash console. This label shows the location of the fuses for each option.



Example of a fuse panel layout

When a fuse is suspected to be blown, the following procedure should be followed:

- ☐ Turn off the component or appliance
- ☐ Turn the battery switch to the off position
- Locate and remove the blown fuse
- Replace the blown fuse
- ☐ Turn on the battery switch to the desired location
- Turn on the component or appliance

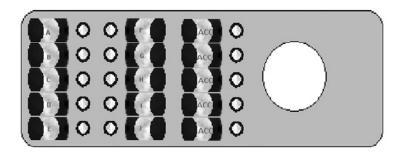
**IMPORTANT:** If a fuse burns out continually, consult your authorized KingFisher dealer.

**NOTE**: As part of the pre-trip safety check list, it is a good idea to make sure that there is a selection of spare fuses on board that can be used in case of emergency.

#### **Dash Panel**

- A. Anchor/Nav light
- B. Forward bilge
- C. Aft bilge
- D. Forward heat fan
- E. Aft heat fan
- F. Interior lights
- G. Aft deck lights
- H. Starboard and center wiper
- Port wiper
- J. Horn

**NOTE**: The dash layout may change depending on the boat model or options chosen.



#### **Breakers**

The breakers are located next to each of the dashboard switches and the 12v accessory plug in. When the breaker is tripped, the button will pop out. Simply press the breaker button back in to re-set. If the same breaker pops continually, consult an authorized Kingfisher dealer.

#### **Navigation Lights & Horn**

The correct function of the navigation lights and horn are critical to safe operation of the boat.

# **Cabin lights**

The cabin lights are controlled by the cabin light switch.

# **Deck lights**

The deck light illuminates the cockpit area of the boat and is operated by the deck light switch.

## **Wipers**

The wipers are controlled by operating their corresponding dash mounted switches.

#### **Troubleshooting**

If the navigation, anchor lights or horn are not operating correctly:

- Confirm that the battery system is fully charged and functioning and that all wires leading to the batteries are secured firmly to the battery posts
- ☐ Check that the main 30 amp fuse and the fuse under the dash have not blown
- Check that the bulbs in the lights are not blown
- Once the above has been checked, if the lights or horn are not functioning correctly consult an authorized KingFisher dealer

**Note:** If the boat is going to be operated at night or in poor visibility, the navigation light and the anchor light must be turned on. If the boat is being anchored at night or in poor visibility, the anchor light must be turned on. Check the local State or Provincial guidelines or with the U.S. or Canadian Coast Guard for this and further safety regulations.

# **Accessory Wire Harness (Optional)**

An optional wiring upgrade is available on all KingFisher models.

This consists of a direct power feed from the battery switch to a fuse block and bus bar located underneath the dash.

The positive feed is fused with a 30 amp inline fuse located close to the battery switch, behind the bilge doors.



If components that are wired into the upgrade wiring system fail to operate:

- Confirm that the battery switch is turned on.
- ☐ Confirm that the battery system is fully charged and functioning and that all wires leading to the batteries are secured firmly to the battery posts.

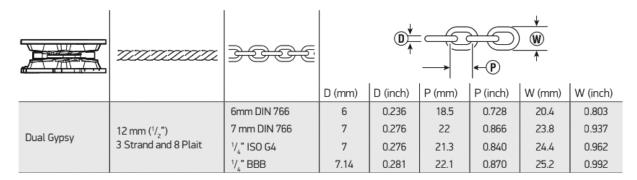
- ☐ Check that the 30 amp inline fuse has not blown
- ☐ Check that the component fuse has not blown, and that the component is not faulty
- Once that all the above has been checked, if the component is still not operating, consult an authorized Kingfisher dealer

If a component or appliance trips the breaker:

- ☐ Turn off the appliance or component
- ☐ Move the breaker switch back into the on position
- ☐ Turn on the component or appliance

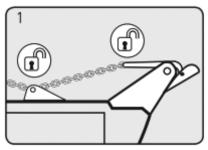
**Note**: If an appliance or component trips its breaker continually, do not use the appliance or component and refer to an authorized KingFisher dealer.

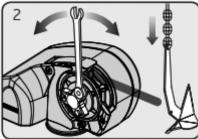
# ANCHOR ROPE AND CHAIN REQUIREMENTS

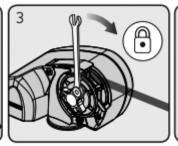


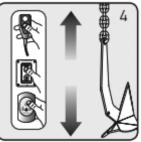
# **Anchoring:**

(a) Anchoring (manually controlled freefall):









- 1. Release any anchor locks.
- 2. When safe, insert the Lewmar wrench in to the capstan drive cap. Rotate clockwise to grip the gypsy and anticlockwise to free the gypsy controlling the rate of descent of the anchor. Lock the clutch by turning the drive cap clockwise and engage the anchor locks.
- 3. To return the windlass back to powered operation lock the clutch by rotating the capstan drive cap clockwise until tight and remove the wrench handle.
- 4. Engage the circuit breaker/isolator and press the up button.
- 5. NOTE: If the clutch nut is not tight the internal clutch mechanism will rotate freely and not engage the drive to the capstan.
  - a. Anchoring (powered UP/DOWN):

#### To release anchor:

- 1. Check clutch nut is tight. If the clutch nut is not tight the internal clutch will rotate freely and not engage the drive to the capstan.
- 2. Release any anchor locks.
- 3. Engage the circuit breaker/isolator. Press DOWN button.

# To retrieve anchor:

1. Press the UP button continuously to retrieve the anchor.

**Note:** If the clutch nut is not tight the internal clutch will rotate freely and not engage the drive to the capstan.

#### TruePower Combi 2000 Pure Sine Wave Series



Your new ProMariner TruePower Combi unit is current limiting with built in "smart" features to monitor vital functions and preclude damage to the charger and the installed system. The unit incorporates alarms, indicators and an auto shutdown feature for peace of mind and trouble free operation. This section contains descriptions of the LED indications and functions of controls. Turning the unit OFF and ON again will restart the unit after a fault, however, if the fault is still present, the unit will again shut down.

**Inverter** – The TruePower Combi serves as a Pure Sine wave or a Quasi (modified) Sine wave inverter, converting DC power to clean, reliable AC power.

**Charger** – The TruePower Combi also serves as a high efficiency automatic battery charger suitable for all commonly available battery types.

**Transfer Switch** – The TruePower Combi includes an internal, automatic 30 amp AC Transfer switch that senses the presence of AC shore/station power. Upon connection to a shore power/shore station source, the Combi will switch from INVERTER mode (providing AC power via DC battery source) to CHARGE mode, automatically. This switch, in compliance with ABYC E-11, disconnects the neutral AC lead from the AC ground when in shore/station power mode.

1. Remote Panel LED Indicators			
	LED Color	Function When Illuminated	
Shore Station/ Power Charger	Green	Shore/station power Connected/Charging	
Inverter	Green	Inverter On/Shore/station power disconnected	
Fault Condition	Red	Fault Condition, See Troubleshooting Section	

NOTE: This panel is removable from the TruePower Combi unit to be located in an area of greater convenience. A dummy plate is included in the package. See the Installation section for more details on removal of the remote panel and installation of the dummy plate.

2. Three Position Rocker Switch (Inverter feature ONLY)			
Switch Position	Action		
Auto Standby	Power on with Standby mode. Loads connected below 20W will NOT activate the Inverter		
Power Off	Both the Inverter and the charger disabled.		
Power On, Without Auto Standby	Power to Inverter is enabled, Auto Standby disabled.		
Resetting the Unit After a Fault	Cycle power Off, then On again, the unit will reset. The unit will continue to shut down if the fault is present. In this event, consult the Troubleshooting section of this manual.		

# OPTIONS AND FEATURES

## Airtronic D2 Heater (Optional)

The Airtronic D2 is a compact diesel burning 7,500 BTU/hr air heater. These heaters provide hot air to the interior of the boat for passenger comfort and window defrosting. Various control options are available to operate the heater. It cycles through four heat outputs modes, (boost, high, med, low) in order to maintain a desirable temperature. In the event that the heat output required is less then what the "low" power mode is distributing the heater switches to "stand-by" mode.

# **Espar Hydronic Heater (Optional)**

The Espar Hydronic heater not only provides hot water but also cabin heat by ducting hot air via fan heaters into the cabin, cuddy and dashboard vents. The Espar Hydronic heater works by circulating heated water in a closed loop through a heat exchanger in the hot water tank and then in turn through two different radiator blower units located below the rear counter top and underneath the dash footrest. The blowers for these units are operated by switches on the dash.

## **Hot Water Tank**

The hot water tank works in conjunction with the Espar D5 hydronic heater and the shore power. When the boat is plugged into shore power, the hot water tank runs off 120 AC voltage with the main breaker switched on and the hot water tank breaker switched on. When the boat is not plugged into shore power, the water gets heated by the coolant being circulated by the D5 Espar heater.

# **Shore Power System**

The shore power breaker panel is located to the starboard side of the helm seat. The shore power option enables the boat user to run the boats electrical components without the use of the internal battery system.

# To hook up to shore power:

- ☐ Ensure that the AC main 30 amp switch on the shore power panel is turned off.
- □ Plug the shore power cord into the boat's shore power socket. The boat's plug in socket is located below the starboard side gunnel in the top side tray.
- Plug the shore power cord into the dock power supply.
- ☐ Turn on the shore panel AC main 30 amp switch.
- ☐ Check the shore power panel for reverse polarity warning lights.



These lights are located adjacent to the panel's breakers. If reverse polarity is indicated immediately disconnect the shore power cord, and consult an authorized KingFisher dealer.

A green light on the shore power breaker panel will be illuminated when the system is operational. Each breaker in the breaker panel is clearly labelled with its intended use.

The shore power system is installed with two 110v power receptacles. The first is located next to the breaker panel with the second located below the rear port side counter top. These receptacles are GFI protected and have a breaker button built into the front of the receptacle. If the GFI breaker trips, the button will pop out. Depress the button to re-set the breaker. There is also a test button located on the face of the GFI plug in, simply depress the test button until the built in breaker button pops out. This test should be carried out frequently to ensure that the circuit breaker is working correctly. Be sure to reset the breaker button before using the plug in.

# Inverter/Battery Charger

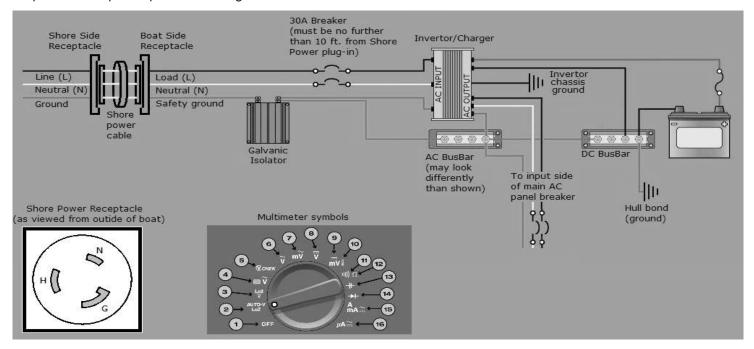
The Pro Mariner True Power 2000 is a combination inverter/battery charger, converting DC power to clean, reliable AC power to allow systems on board to function by DC battery power or by AC shore power. This inverter also has an integrated battery charging system that automatically starts charging all batteries on board when plugged into shore power.

When plugged in to shore power, the presence of AC current begins the charging cycle, as well as indicates to the whole system that the inverter is NO LONGER providing inverter power and is providing AC power as a pass-through.

#### **Galvanic Isolator**

Every boat that receives a shore power package also receives a galvanic isolator. The isolator works by interrupting galvanic circuits created with other boats and the dock when the boat shore power is plugged in and operational.

The galvanic isolator's operational indication lights are visible behind the helm seat through an access hole in the carpeted shore power panel mounting board.



For operational instructions please refer to the manufacturer's owner's manual.

#### AC/DC Fridge

An AC/DC fridge option is provided with the Dockside package. Both AC and DC power can be connected to the fridge at the same time. The unit will always run on AC when AC power is available. Should the AC be disconnected there is a one minute time delay before the unit continues to run on DC. If AC power is reintroduced the unit immediately switches back to AC.

Start up: Turn the power on and set the thermostat between 3 and 4. You can make further adjustments after the box has cooled down. Allow the refrigerator to come down to temperature before putting product in. Setting the thermostat to a higher setting i.e. 7, will not decrease the time required for the unit to cool down to its normal operating temperature. AC/DC units cool at the same rate on DC as on AC.

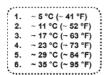
#### **Two Burner Alcohol Stove**

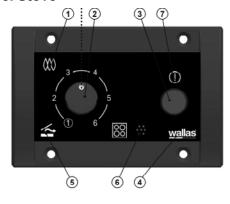
The ORIGO stove has a non-pressurized alcohol burner. The alcohol is absorbed into a non-flammable material in the canister. Remove the cutting board. Pull the stove top latch forward and lift the stovetop up. Caution should be taken while fueling the canister. Be sure the flame is completely extinguished. Remove each canister from the stove to fuel one at a time. It should be cool enough to be tangible with bare hands. Do not over fill the canister. Max capacity is 1 quart. Check the fuel level by tilting the canister vertically. Hold this position for 5-10 seconds. Once the fuel is visible in the non-flammable material at the bottom of the opening, the canister is full. The stove will operate if the canister is not filled to the max capacity. Be sure to clean up any spilt fuel. Close the stove top before lighting.

Lighting the burner: A hand held butane bbq lighter is recommended. Slide the control to the maximum opening. Stick the lighter in towards the canister and ignite.

Extinguishing the flame: Slide the control to the "Off" position. Wait a few moments. Confirm the flame is extinguished by opening it back to wide open. Repeat if flame is still burning. Wait until the stovetop is completely cooled off before replacing the cutting board.

#### Wallas 85DU Diesel Stove





- Temperature adjustment / Power control Heating switch Power indicator
- Thermostat sensor

Fueling: The diesel tank for this device is shared with the diesel D5 Espar heater. It is located mid ship, behind the cabin bulkhead on the port side. It is encased in an aluminum compartment with a hinged door.

Start up: To get the stove turned on, continuously press (3) for approximately 2 seconds, at which point, the power control indicator (4) illuminates, letting you know the stove is ready for use. The stove switches normal mode once the switch is released after holding for 2 seconds. At this point, the yellow heating indicator (7) illuminates. The red combustion indicator (1) will illuminate when the burner flame has be ignited and the flame is stabilized (About 5 minutes). The whole start up process takes approx. 11 minutes.

**Normal use**: The heating level is adjusted by turning the knob (2). Avoid turning the knob rapidly as this may cause the unit to get sooty.

Heating/thermostat mode: Requires the blower lid assembly. When the lid is folded over the ceramic top, the heating mode can be activated by turning the control knob (2) to min-max-min-max while the yellow heating indicator (7) is illuminated. To confirm the heating mode has been activated, the yellow thermostat indicator (5) will be illuminated. Once passed the ignition phase, the temp is controlled by turning the knob. When the thermostat indicator is illuminated brightly, the desired temp has not been reached. When it dims, the desired temp has been achieved.

Returning to manual mode: Repeat the min-max-minmax procedure and the thermostat indicator will go out and the unit will return it to manual use mode.

**Shut down**: By pressing the heating switch (3) for approx. 2 seconds at which point the yellow heating indicator light (7) will go out immediately. The red combustion indicator (1) will continue to blink for 5 minutes while the unit is cooling down. It cannot be restarted until it is cooled down and the red indicator stops flashing.

# BATTERIES

The 3125/3425 will be equipped with two starting batteries and two house batteries. Certain engine manufactures recommend different types of batteries over others. Refer to the engine manufacturer recommendations for proper battery type and size. There will be one 24 series starting battery for each engine, located on the starboard side inside the bilge access area. The house batteries are located on the port side and will be 27 series, lead acid.

# **Battery Control Center**

The battery control center main cluster is located in the bilge compartment. This system has a dedicated key switch, located on the Starboard side in the face of the cabinet. This key switch controls the starting and house battery switches. It allows the the operator to conveniently operate all battery isolation with a simple turn of a key.

Once the engines have been started and the cranking batteries have reached the peak charge of 13.7/24.4 volts the system will automatically switch to charging the house batteries. This ensures all batteries are being charged adequately.

Battery management key switch. Located on dinette face.





# **Battery Maintenance**

- Keep battery cables tightly connected and corrosion free.
- ☐ Ensure batteries are securely mounted at all times.

If the boat is not used for a month or more:

- Remove the batteries
- Clean the battery's casing and terminals with a mixture of baking soda and water (one tbsp of baking soda to one cup water)
- Apply dielectric grease or petroleum jelly to battery terminals

**Note**: If the battery is to be stored for a prolonged period of time, store the battery in a cool, dark place. Check the specific gravity of the battery fluid at least once a month and recharge the battery if required.

# **Battery Chargers**

The optional charger is located behind the rear starboard side inspection panel and is set up to charge all batteries when the shore power is plugged in.

Please refer to the manufacturer's owner's manual for operating and safety instruction.

# TRIM TAB OPERATION

The trim tab switch is located to the starboard side of the main steering wheel.

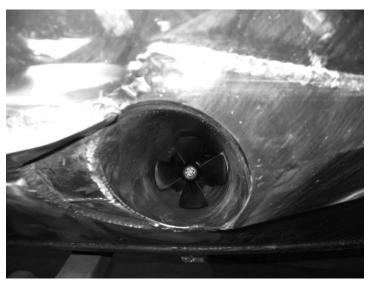


Please refer to the manufacturer's owners manual for operating and safety instruction.

# **BOW THRUSTER**

An optional bow thruster is available on the 3125/3425 Offshore. The bow thruster is operated by way of a dash mounted joy stick.

The bow thruster motor and tube are located beneath the cuddy platform. The main 250-amp fuse for the bow thrusters is located at the stern of the boat beside the battery switch.



**Bow Thruster Prop** 



Joy stick

For bow thruster operational instructions please refer to the manufacturer's owner's manual.

#### WATER AND PLUMBING

#### **Bilge Pumps**

There are 2 bilge pumps located in the stern portion of the bilge directly behind the fuel tank. The first of these two bilge pumps is located at the lowest point of the bilge, below the battery trays. The second pump is installed approximately 3" up the side of one of the main stringers behind the fuel tank. This bilge pump is installed as a backup emergency pump. If the pump located in the bilge becomes clogged or malfunctions, the second back up pump will kick in if the bilge water level rises and trips its float switch.

**Note:** The bilge pump will only reduce the water level to 3/4" from the bottom of the hull. Some water will always be left in the bottom of the hull. Do not run the bilge pump dry for prolonged periods of time. Never depend upon an automatic system as the only guarantee to keep water out of your boat, periodical manual checking of the bilge water level must be done. Bilge pumps should always be checked for correct operation each time the boat is operated.

**Note:** The second bilge pump location is designed to minimize the possibility of the pump becoming clogged with foreign objects and debris that may accumulate in the bilge of the boat.

There is a third bilge pump located inside the cabin door, under the vinyl floor board, just in front of the hot water tank. This pump clears bilge water from inside the cabin. It is important not to forget to clean out all bilge pumps and check for correct operation as part of your pre-trip safety check.



Cabin Bilge Pump

#### **Bilge Pump Operation**

The main bilge pump(s) is controlled by means of a switch located on the dash and secondly, by an integral float switch that will be tripped by rising water levels. The battery switch will need to be in the Battery 1, Battery 2 or the "All" position for switched power at the dash to trip the pump. The float switch power to all bilge pumps is hooked up directly to the battery bypassing the battery switch.

#### To test the operation of the pumps:

 Turn the small knob located on the back of the bilge pump, this lifts up on the float paddle and trips the pump



- Once the float switch is tripped, the pump will turn on.
   Once correct operation is confirmed, release the knob
- Turn on the battery switch to Battery 1, Battery 2 or to the All position
- Switch on the bilge pump switch at the dash and check that the pump has tripped, once correct operation is confirmed turn off the switch

#### **Back Up Bilge Pump**

The back up bilge pumps is located approximately 3" up onto the port side stringer at the rear of the bilge. This bilge pump is an emergency back up pump and is wired directly to the battery only. This pump is tripped by an internal float switch only.

#### To test this pump:

- Turn the small knob located on the back of the bilge pump, this lifts up on the float paddle and trips the pump
- Once the switch is tripped, the pump will turn on. Once correct operation is confirmed, release the knob

**Important:** If the backup pump fails to work, clean out the pump as described below. Check the main 10 amp fuse that is located on the bilge pumps positive lead to the battery and check that the battery system is fully charged and operational. After confirming the above, if the pump is still not working, DO NOT OPERATE THE BOAT, consult a KingFisher dealer.

#### **Ball Valve Operation**

Every option that requires water to be drawn from the outside of the boat is fitted with a stainless steel ball valve. The valve is attached to the water pick up thru-hull and is opened by turning the handle 90 degrees.

Important: When not in use, any water pick up ball valve should be in the shut or off position.

Shut Position



Open Position



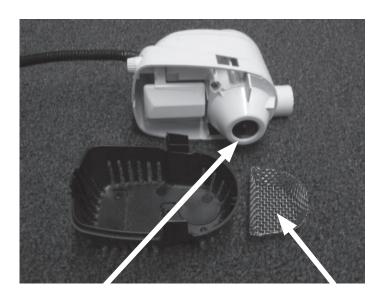
#### Cleaning a Bilge Pump

**Important:** Before each time that the boat is operated, the bilge pumps should be cleaned out thoroughly, tested and checked for any signs of wear or damage.

- 1. Remove the top section of the bilge pump by pressing in the two tabs located at the sides of the pump body.
- 2. Lift up on the pump body to expose the pick up and strainer basket.



- 3. Clean all debris out of the strainer basket and the pick up
- 4. Replace the bilge pump if the pump is showing any signs of wear or damage.
- 5. Re-assemble the bilge pump and test as described in the bilge pump operation



#### FRESH WATER SYSTEMS

There are two fresh water systems that may be offered

- 1. Cold fresh water system
- 2. Hot and cold fresh water system

**Important:** KingFisher Boats are delivered winterized. All water system components are treated with RV anti-freeze. These components **MUST** be flushed out with fresh water thoroughly before use.

#### **Cold Fresh Water System**

The cold fresh water system consists of a 40 USG fresh water holding tank. The system is supplied via an on-board pressurized water pump.

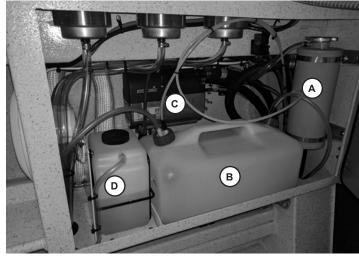
To operate the system:

- ☐ Fill the fresh water holding tank with fresh water. The holding tank is location below the floor just inside the aft cabin door.
- ☐ The deck fill cap is indicated in blue and is located on the starboard side gunnel, mid ship.
- ☐ Ensure that the battery switch is in the correct battery position. (See battery switch)
- ☐ The pressure pump switch is located on the dinette switch plate.

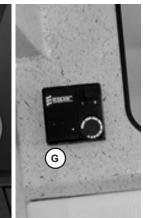


## Hot / Cold Water System with Heater / Defroster and Shower

The hot water system is heated by an Espar Hydronic diesel heater, which is located in an aluminum compartment on the port side behind the cabin bulkhead. The main power switch and thermostat are located on the other side of the bulkhead, inside the cabin.







- A. Coolant reservoir
- B. Diesel tank
- C. D5 Hydronic heater
- D. Coolant overflow tank
- E. Rad Cap access
- F. Rap Cap
- G. Thermostat/ Main power switch

#### **Periodic Heater Maintenance & Troubleshooting**

In the event of a failure there are several items which should be checked before major troubleshooting is done:

- Remove rad cap and confirm coolant level is filled to the top of the reservoir. If coolant is low, add a 50/50 mix of automotive coolant
- Check coolant hoses and fuel lines for leaks
- Check electrical harnesses and connections for corrosion
- Run the heater for a minimum of 15 mins once a month, even when the boat is not in use
- Maintain the batteries and electrical connections in good condition. When the system senses insufficient power supply, the heater will not start
- Low and high voltage cut-outs will shut the heater down automatically
- · Check circuit breakers and fuses
- Make sure there are no obstructions at the combustion intake and exhaust
- · Make sure there is adequate fuel in the tank



Care should be taken not to overfill the diesel fuel tank as fuel may expand and overflow out of the tank or fittings. Only fill the fuel tank to 7/8 of the tank's capacity.

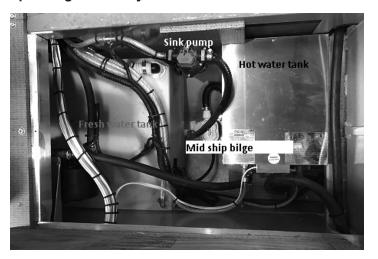
To avoid potentially dangerous onboard fuel spills, always remove the diesel tank out of the cabin area before filling it with fuel.

If diesel fuel spills onto your skin, immediately wash with soap and water. Change clothing if saturated with diesel fuel. If diesel fuel gets into your eyes or diesel fumes are inhaled, seek medical attention. If diesel fuel is swallowed, seek medical attention.

#### **Hot Water Tank**

The hot water tank is located under the floor, just inside the cabin. The fresh water in the hot water tank can be heater either by the Espar Hydronic system or by AC shore power. The hot water tank is hard wired into the shore power system and will automatically run off of the shore power source once that the power supply is connected.

Refer to the hot water tank manufacturer's manual for operating and safety instructions.



#### **Shower System**

The showerhead is incorporated in the sink faucet and locks into the supplied bracket on the overhead shelf.

The water pick-up and ball valve for the toilet is clearly labelled and located behind the fuel tank, below the bilge doors.



The shower drains directly into a sump pump which is located on the starboard side, below the floor under the fridge. The sump contains a small pump which is tripped by the way of a float switch.

When the pump is tripped, the waste water is directed overboard by way of a through hull.

**Important:** To maintain sump operation it is necessary to clean out the filter screen in the sump box regularly.

#### To clean out the shower sump:

- 1. Expose the sump by removing the fridge and pulling up the access hatch
- Remove the Philips screws in the four corners of the sump box lid and carefully remove the lid
- 3. Remove the sump inlet filter screen
- 4. Clean the screen of debris and foreign objects
- 5. Replace the screen
- 6. Test the pump function by lifting up on the float switch

**Note:** Do not activate the pump dry for longer than a second or two as this may damage the pump rendering it inoperable.

When operating the shower system the water pressure pump switch must be turned on. The water pressure switch is located in the top draw front of the cabinet adjacent to the head stall.

**Note:** Always ensure that there is sufficient water in the fresh water tank to allow water to be drawn by the pressure pump prior to operating the shower system. Running the system dry may cause severe damage and render the system inoperable.

#### If the pump fails to activate:

- · Confirm there is sufficient water in the water tank
- · Confirm the battery switch is turned on
- Confirm the battery system is fully charged and functioning and that all wires leading to the batteries are secured firmly to the battery posts
- Check the main 30 amp fuse and the fuse under the dash have not blown
- Once the above has been checked, if the shower pump is still not working, consult a KingFisher dealer



Shower sump box



Remove filter screen



Tripping the float switch

#### **Head (toilet)**

The water supply for the head is drawn via a ball valve fitting directly from the outside water.

#### To operate the head

Before use, make sure that there is enough water in the toilet bowl to prevent the toilet paper becoming compacted at the bottom of the bowl. To do this:

- Open the water pick up ball valve which is clearly labelled and located in the bilge of the boat, behind the fuel tank
- ☐ Ensure that the flush control lever is set to open
- ☐ Pump the toilet handle with long smooth strokes until adequate water has flown into the toilet bowl
- ☐ During use, pump as necessary to keep contents of the bowl low enough for comfort
- ☐ Pump as much water in the bowl as necessary to flush the contents into the holding tank
- Once the toilet bowl is clear, close the ball valve and turn the flush control lever to the closed position

#### **Grey Water Holding Tank**

Head waste will flush directly into the black water holding tank. The tank is located on the starboard side, under the cabin floor. The black water holding tanks are black in color.

From the holding tank there are two choices,

- 1. Firstly, the holding tank can be pumped out through the Waste Pump Out. See Hull Layout for pump out deck location. To do this simply turn the "Y" valve to the "Pump Out" location and ensure that the toilet lever is in the open or up position.
- 2.The tank can also be sucked out from a dock side waste station. Position the "Y" valve to the dockside position; attach the pump out hose attachment to the outside fitting and operate the pump out station as directed.

**Note:** It is only necessary to turn on the macerator pump when pumping the contents of the waste tank overboard.

## "Y" Valve Operation and Holding Tank Contents Disposal



#### Y Valve Location

The "Y" valve is located in the head stall on the sink galley lower to the floor.

**Important:** Be sure to check with local authorities or Coast Guard regarding state or provincial overboard waste discharge regulations.

**Important:** Take care not to allow any foreign object or materials to enter the waste system





Plastic parts may crack and the enamel coating on the seat and lid may blister if they come into contact with aggressive chemical agents such as Acetone or Bleach. Do not use abrasive pads on any part of the toilet and do not use cream cleaners on any part of the toilet except for the toilet bowl.

#### **Cleaning the Toilet**

- ☐ To clean the bowl, use any liquid or cream ceramic cleaner.
- ☐ To clean the rest of the toilet, including the seat and lid, use a non-abrasive liquid cleaner. Polish with a dry cloth only.
- ☐ To disinfect the toilet, use a liquid disinfectant diluted in accordance with the manufacturer's instructions. You may apply it to all parts of the toilet using a sponge or soft brush as necessary.



Do not use thick liquid toilet cleansers or undiluted bleach. They may damage the valves, gaskets, seals and the enamel coating of the seat and lid.

#### **Fish Box Pumps:**

The fish lockers are located on port and starboard in the deck floor.

Each fish locker is fitted with a diaphragm evacuation pump. These pumps are operated by switches located on the rear helm.

- When a fish locker needs to be drained, simply turn on the battery switch and then operate the pump switch until the locker has drained fully.
- Once the locker has drained, turn off the pump switch.

#### **Fish Box Troubleshooting**

The waste from the fish lockers is evacuated out of through hulls located at the rear of the boat. If the pump(s) do not work correctly,

- Confirm the battery system is fully charged and functioning and all wires leading to the batteries are secured firmly to the battery posts
- ☐ Confirm the battery switch is turned on
- ☐ Check that the main 30 amp fuse and the fuse under the dash have not blown
- ☐ Once the above has been checked, if the pump is still not working, consult a KingFisher dealer

#### Livewell and Wash down

Livewell or bait tank is located at the aft deck. The switch to turn on the aerator is located on the rear helm.

### **SECTION 8 - TROUBLESHOOTING**

The following trouble shooting information is a basic general guideline to possible issues. Always consult your authorized KingFisher dealer if issues persist. Check engine operator's manual for detailed engine troubleshooting information

Symptom	Probable Cause	Corrective Action	
Electrical system dead	Battery switch turned off/ Main fuse blown	Turn main switch on / replace main fuse/ inspect electrical system for overload / short circuit	
Wipers or Bilge Pump or Light won't work	Blown circuit breaker / fuse Pump plugged or hose disconnected	Inspect component and circuit Unplug pump or connect hose. Have boat serviced	
Fuel gauge not functioning	No fuel in tank	Fill fuel tank	
	Loose or disconnected wire Faulty gauge	Check sending unit wires  Have the sending unit or gauge serviced	
Tachometer not functioning	Loose wire Faulty sensor Faulty gauge	Check sending unit wires  Have the sensor or gauge serviced	
Boat performance is poor or boat vibrates	Propeller or outboard leg is fouled	Turn off engine and inspect prop and motor leg.	
	Incorrect propeller	Change prop	
	Boat is overloaded or poor load distribution	Check and adjust boat loading. Check for water in bilge	
	Motor is not trimmed	Adjust trim angle	
	properly  Engine damage or problem Hull damage	Consult your engine manual. Inspect hull bottom for damage	
Abnormal amount of water	Boat has a leak	Bail water out	
in boat	Hull drain plug missing	Turn bilge pump on. Plug leak	
		Insert hull drain plug/ call for help	
Engine quits/won't start	Engine problems Dead battery	Consult engine owner's manual. Replace battery/ have boat serviced. Use paddles/call for help	
Engine coughs / sputters	Inadequate Fuel Supply	Confirm fuel in tank, clear obstructed or pinched lines, clean fuel filters/strainers, check fuel filter/sediment bowl for water in fuel	
	Dirty spark plugs	Replace spark plugs	
Rough Ride	Excessive speed	Reduce speed adjust trim	
	Engine trimmed incorrectly Poor load distribution	Adjust loading	
Alarm buzzer sounding	Engine problems – low oil or overheating	Turn motor off immediately. Consult engine owner's manual. Have boat serviced	
Boat persistently smells of gasoline	Fuel spilled into bilge/fuel system leak	Check bilge for gasoline/evacuate boat/ inspect fuel system for leaks	

Symptom	Probable Cause	Corrective Action	
Engine runs hot	Low oil or coolant Broken / stretched belt Plugged water inlet	Check oil level/coolant level (after engine cool down)	
	Damaged water pump or thermostat	Replace broken/stretched cooling system belt  Clear raw water intake. Replace raw water pump Replace thermostat	
		Replace water pump impeller	
Engine stops suddenly	Ignition or battery problems Safety lanyard	Check ignition wiring and fuse. Check battery connections. Check safety shut off lanyard	
	pulled	Check engine manufacturer's operations manual for more detailed information	
Erratic Steering	Trim set incorrectly Steering system loose or low on fluid	Adjust motor/drive trim  Tighten steering wheel	
	low on huid		
		Bleed hydraulic lines. Check oil level	
Electrical issue	Loose wire	Check the circuit breakers on the control panel	
	Faulty sensor	Check the main fuse	
	Burnt fuse	Check wire lead connections	
	Popped breaker	Check for clean battery terminals	
	Corroded wires/connections	Check battery for sufficient charge	
	Dead battery		

Consult an authorised KingFisher dealer if the problem persists.

## SECTION 9 — NAUTICAL TERMS

Abeam	Object 90 degrees to centerline on either side of the boat		
Abaft	A point on a boat that is aft of another		
Aft	Toward the rear or stern of the boat		
Beam	The width of a boat.		
Bow	The fore part of a boat		
Bulkhead	Vertical partition in a boat		
Chine	Meeting juncture of side and bottom of boat.		
Chock	Deck fitting, used as guide for mooring or anchor Lines. Also, a wedge to stop wheels from rolling		
Cleat	Deck fitting with arms or horns on which lines may be made fast		
Cockpit	An open space from which a boat is operated		
Deck	Upper structure that covers the hull between gunnels		
Draft	Depth of water required to float boat and its propulsion system		
Fathom	Six feet		
Fenders	Rope or plastic pieces hung over the side to protect the hull from chafing		
Freeboard	Height of exposed hull from water line to deck		
Ground Tackle	General term referring to anchors, anchor lines, etc		
Gunnel/Gunwale	Meeting juncture of hull and deck; or the highest edge of the hull side		
Hatch	A deck opening providing access to the space below		
Head	Toilet or toilet room		
Helm	The tiller, wheel and other steering gear		
Keel	The lowest external portion of the hull		
Knot	Nautical mile per hour; one nautical mile is 1851.96m (6,076 ft.); a land mile is 1609.34m (5,280 ft.)		
Lee	The direction toward which the wind blows		
Port	To the left side of the boat facing forward		
Porthole	A hinged window in the boat's cabin or hull		
Scupper	An opening in a deck or cockpit permitting water to drain overboard		
Stanchion	A fixed, upright post used for support (of rails or lifelines)		
Starboard	To the right side of the boat facing forward		
Stern	The after portion of the boat		
Stern Drive	Inboard / outboard propulsion unit		
Transom	The transverse part of the stern		
Windward	The direction from which the wind is blowing		

## SECTION 10 — MAINTENANCE LOG Kingfisher Model: Serial # (HIN):

Trailer:\_\_\_\_\_

Make of Motor:

Date	Maintenance	Description	Engine Hours

# **MARNING**

Operating, servicing and maintaining a recreational marine vessel can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, service your vessel in a well-ventilated area and wear gloves or wash your hands frequently when servicing this vessel. For more information go to www.P65warnings.ca.gov/marine.



www.kingfisherboats.com





