



**AQUANAMI**

2016

**OPERATOR'S  
GUIDE**

Includes Safety, Watercraft and  
Maintenance Information

**JETANGLER**

**⚠ WARNING**

Read this guide thoroughly.  
It contains important safety information.  
Minimum recommended operator's age: 16 years old.

 **WARNING**

Disregarding any of the safety precautions and instructions contained in this Operator's Guide and on-product safety labels could cause injury including the possibility of death!

## FOREWORD

Congratulations on your purchase of a new AQUANAMI watercraft. It is backed by the AQUANAMI warranty and authorized AQUANAMI dealers ready to provide the parts, service or accessories you may require. Your dealer is committed to your satisfaction. He has taken training to perform the initial setup and inspection of your watercraft as well as completed the final adjustment before you took possession. If you need more complete servicing information, please ask your dealer. At delivery, you were also informed of the warranty coverage and signed the PREDELIVERY CHECK LIST to ensure your new watercraft was prepared to your entire satisfaction.

### Know Before You Go

To learn how to reduce the risk for you or other persons being injured or killed, read the following sections before you operate the watercraft:

- SAFETY INFORMATION
  
- WATERCRAFT INFORMATION

Read and understand all safety labels on your watercraft. Failure to follow the warnings contained in this Operator's Guide can result in serious injury or death.

AQUANAMI highly recommends that you take a safe boating course. Please check with your dealer or local authorities for availability in your area.

#### **WARNING**

Get familiar with this watercraft; it may exceed the performance of other motorized watercrafts and PWCs you have ridden.

## Safety Messages

This Operator's Guide utilizes the following symbols and words to emphasize particular information:

**⚠ WARNING** Indicates a potentially danger! Failure to follow WARNING instructions could result in serious injury or death.

**CAUTION:** Indicates special precaution, if not followed, could severely damage the machine.

**NOTE:** Provides key information to make information clearer.

<b>⚠ WARNING</b>
For your safety, understand and follow all the safety precautions and instructions contained in this OPERATOR'S GUIDE. Failure to do so can result in SEVERE INJURY OR DEATH

## About this Operator's Guide

This Operator's Guide has been prepared to acquaint the owner/operator or passenger with this watercraft and its various controls, maintenance and safe riding instructions.

Keep this Operator's Guide in the watercraft as you can refer to it for operation, instructing others, maintenance and troubleshooting.

The information contained in this document is correct at the time of publication. However, AQUANAMI maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Due to late changes, some differences between the manufactured product and the descriptions and/or specifications in this guide may occur. AQUANAMI reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring any obligation upon itself.

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***SAFETY  
INFORMATION***

## **GENERAL PRECAUTIONS**

### **Avoid Carbon Monoxide Poisoning**

All engine exhaust contains carbon monoxide, a deadly gas. Breathing carbon monoxide can cause headaches, dizziness, drowsiness, nausea, confusion and eventually death. Carbon monoxide is a colorless, odorless, tasteless gas that may be present even if you do not see or smell any engine exhaust. Deadly levels of carbon monoxide can collect rapidly, and you can quickly be overcome and unable to save yourself. Also, deadly levels of carbon monoxide can linger for hours or days in enclosed or poorly ventilated areas. If you experience any symptoms of carbon monoxide poisoning, leave the area immediately, get fresh air and seek medical treatment. To prevent serious injury or death from carbon monoxide:

- Never run the watercraft in poorly ventilated or partially enclosed areas such as watercraft houses, seawalls or other boats in close proximity. Even if you try to ventilate engine exhaust, carbon monoxide can rapidly reach dangerous levels.
- Never run the watercraft outdoors where engine exhaust can be drawn into a building through openings such as windows and doors.
- Never stand behind the watercraft while the engine is running. A person standing behind a running engine may inhale high concentrations of exhaust fumes. Inhalation of concentrated exhaust fumes that contain carbon monoxide can result in CO poisoning, serious health problems and death.

### **Avoid Gasoline Fires and Other Hazards**

Gasoline is extremely flammable and highly explosive. Fuel vapors can spread and be ignited by a spark or flame many feet away from the engine.

To reduce the risk of fire or explosion, follow these instructions:

- Use only an approved red gasoline container to store fuel.

- Strictly adhere to the instructions in FUELING section.
- Never start watercraft if gasoline or gasoline vapor odors are present in the engine compartment.
- Never start or operate the engine if the fuel cap is not properly secured.
- Do not carry gasoline containers in the storage bin (if equipped) or anywhere else on the watercraft.

Gasoline is poisonous and can cause injury or death.

- Never siphon gasoline with your mouth.
- If you swallow gasoline, get any in your eyes, or inhale gasoline vapors, see a doctor immediately.

If gasoline is spilled on you, wash thoroughly with soap and water and change your clothes.

## **Avoid Burns from Hot Parts**

Certain components may become hot during operation. Avoid contact during and shortly after operation to avoid burns.

## **Accessories and Modifications**

Do not make unauthorized modifications, or use accessories that are not approved by AQUANAMI. Since these changes have not been tested by AQUANAMI, they may increase the risk of accidents or injuries, and they can make the watercraft illegal for use on water. See your authorized AQUANAMI dealer for available accessories for your watercraft.

# **SPECIAL SAFETY MESSAGES**

## **Reminders Regarding Safe Operation**

The performance of this watercraft may significantly exceed that of other watercraft you may have operated. Make sure you read and understand the content of this Operator's Guide to become completely familiar with the controls and operation of the watercraft before embarking on your first trip, or taking on a passenger. If you have not had the opportunity to do so, practice driving solo in a suitable traffic free area to become accustomed to the feel and response of each control. Be fully familiar with all controls before accelerating above idle speed.

Always keep in mind that as the throttle lever is returned to the idle position, less directional control is available. To turn the watercraft, both steering and throttle are necessary. Do not release throttle when trying to steer away from objects. You need throttle to steer. If the engine is shut off, directional control is lost.

This watercraft does not have A REVERSE GEAR OR BRAKING DEVICE. ALWAYS APPROACH LAND, DOCKS, SWIMMERS OR HAZARDS SLOWLY AND WITH CAUTION TO AVOID COLLISION OR INJURY TO THE RIDER OR SWIMMERS.

Do not store any objects in areas that are not designed specifically for storage. Riding with passenger makes the watercraft handle differently and requires greater skill.

Combustion engines need air to operate; consequently this watercraft cannot be totally watertight. Any maneuvers such as turning constantly in tight circles, plunging the bow through waves, or capsizing the watercraft, that cause the air inlet openings to be under water may cause severe engine problems due to water ingestion. Refer to OPERATING INSTRUCTIONS subsection and the WARRANTY section contained in this Operator's Guide.

Engine exhaust contains carbon monoxide (CO), which can cause serious health problems or death if inhaled in sufficient quantities. Do not operate the watercraft in a

confined area or allow CO to accumulate around the watercraft, or in enclosed or sheltered areas such as when docked, or when rafting.

Know the waters in which the watercraft is to be operated. Current, tides, rapids, hidden obstacles, wakes and waves etc. can affect safe operation.

It is not advisable to operate the watercraft in rough waters or inclement weather. In shallow water, proceed with caution and at very low speeds. Grounding or abrupt stops may result in injury and watercraft damage. Debris may also be picked up and thrown rearward by the jet pump onto people or property.

Keep the tether cord attached to the operator's PFD or wrist (wrist strap required) at all times and keep it free from snagging on the handlebars to help ensure the engine stops should the operator fall off. After riding, remove the tether cord from the engine cut-off switch to avoid unauthorized use by children or others. If the operator falls off the watercraft and the tether cord is not attached as recommended, the watercraft engine will not stop.

Ride within your limits and level of riding ability. Always ride responsibly and safely. Use common sense and courtesy. Respect the environment and the rights of other users of the water ways.

Avoid riding in very rough waters or practicing extreme maneuvers like jumping wakes or waves.

## **Before Getting Underway**

For safety reasons and proper care, always perform the pre-ride inspection as specified in your Operator's Guide before operating your watercraft.

Do not exceed the payload or passenger capacities for your watercraft. Overloading can affect maneuverability, stability and performance. Also, heavy seas reduce capacity. A payload or person capacity plate is not an excuse for failure to use common sense or good judgment.

Regularly inspect the watercraft, hull, engine, safety equipment, and all other boating gear and keep them in safe operating condition.

Be sure you have the minimum required safety equipment, PFDs and any additional gear needed for your cruise.

Ensure that all lifesaving equipment, including fire extinguisher (not supplied with vehicle), are in safe operating condition and easily accessible.

Keep an eye on the weather. Check local weather broadcasts before departure. Be alert to changing conditions. Keep accurate and up-to-date charts of the boating area on board. Before getting underway, check water conditions in the planned boating area.

Ensure there is enough fuel on board for the planned trip. Always verify fuel level before use and during the ride. Apply the principle of 1/3 of the fuel to reach your destination, 1/3 to return, and keep 1/3 in reserve. Allow for changes due to adverse weather or other delays.

## **Operator and Passenger Awareness**

Read and understand all safety labels on the watercraft, the Operator's Guide, all other safety documents before operating the watercraft.

Respect applicable laws. Check local and federal boating laws applicable to the waterways where you intend to use your watercraft. Learn the local navigation rules. Know and understand the applicable navigation system (such as buoys and signs). Remember that sun, wind, fatigue or illness may impair your judgement and reaction time.

Operation of this watercraft by a person under 16 years of age, or a person with a disability that impairs vision, reaction time, judgment, or operation of the controls is NOT recommended.

Always properly use the tether cord when operating the watercraft. Ensure that any operator and passenger know how to swim and how to reboard the watercraft from the water.

Boarding in deep water can be strenuous. Practice in chest-deep water before operating or embarking your watercraft in deep water. Ensure that any operator and passenger wear a PFD at all times and take extra precautions when boating.

Never turn handlebar while someone is near the rear of watercraft. Keep away from steering moving parts (nozzle). Do not start the engine or operate the watercraft if anyone is in the water nearby, or near the rear of the watercraft

Keep away from the intake grate while the engine is running. Items such as long hair, loose clothing, or PFD straps can become entangled in moving parts.

Before re-boarding, make sure engine is off and the tether cord is removed from the engine cut-off switch.

To prevent accidental starting, always remove the tether cord from the engine cut-off switch when swimmers are boarding, nearby, or during removal of any weeds or debris from the intake grate.

Minors should always be supervised by an adult whenever operating a watercraft. Laws regarding the minimum age and licensing requirements of minors may vary from one jurisdiction to another. Be sure to contact the local boating authorities for information regarding the legal operation of a watercraft in the intended jurisdiction of use.

## **Drugs and Alcohol**

Never use with drugs or alcohol. Like driving a car, driving a watercraft requires the operator to be sober, attentive and alert. Operating a watercraft while intoxicated or under the influence of drugs is not only dangerous, but it is also a Federal offense carrying a significant penalty. These laws are vigorously enforced. The use of drugs

and alcohol, singly or in combination, decreases reaction time, impedes judgment, impairs vision, and inhibits your ability to safely operate a watercraft.

## **WARNING**

Alcohol consumption and boating do not mix! Operating with the use of drugs or alcohol endangers the lives of your passengers, other boaters, and yourself. Federal laws prohibit operating a watercraft with the use of drugs or alcohol.

## **Hypothermia**

Hypothermia, the loss of body heat resulting in a subnormal body temperature, is a significant cause of death in boating accidents. After an individual has succumbed to hypothermia, he or she will lose consciousness and then drown. PFDs can increase survival time because of the insulation they provide. Naturally, the warmer the water, the less insulation one will require. When operating in cold water (below 4°C (40°F)) consideration should be given to using a coat or jacket style PFD as they cover more body area than the vest style PFDs.

Some points to remember about hypothermia protection:

- While afloat in the water, do not attempt to swim unless it is to reach a nearby watercraft, fellow survivor, or a floating object onto which you can lean or climb. Unnecessary swimming increases the rate of body heat loss. In cold water, drown-proof methods that require putting your head in the water are not recommended. Keep your head out of the water. This will greatly lessen heat loss and increase your survival time.
- Maintain a positive attitude about your survival and rescue. This will improve your chances of extending your survival time until you can be rescued. Your will to live does make a difference!

- If there is more than one person in the water, huddling together is recommended. This action tends to reduce the rate of heat loss and thus increase the survival time.
- Always wear your PFD. It won't help you fight off the effects of hypothermia if you don't have it on when you go into the water.

## **Safe Boating Courses**

Many countries recommend or require a boating safety course. Check with your local competent authorities. Check local and federal boating laws applicable to the waterways where you intend to use your watercraft. Learn the local navigation rules. Know and understand the applicable navigation system (such as buoys and signs).

# **SAFETY EQUIPMENT**

## **Required Safety Equipment**

The operator and the passenger must wear an approved Personal Flotation Device (PDF) that is suitable for PWC use.

As the owner of the watercraft, you are responsible for assuring that all required safety equipment is aboard. You should also consider supplying additional equipment as needed for your safety and that of your passenger.

Check state and local regulations about required safety equipment. Safety equipment required by regulations is mandatory. If local regulations require additional equipment, it must be approved by a competent authority.

Minimum requirements include the following (not supplied with this vehicle):

- Personal flotation devices (PFDs)
- A buoyant heaving line of 15m (50 ft) minimum
- A watertight flashlight or approved flares Signaling device
- Sound producing devices (air horn or whistle).

## **Recommended Protective Gear**

The operator and passenger must wear protective gear, including:

- A wet suit bottom or thick tightly woven and snug fitting clothing that provides equivalent protection. As an example, thin bike shorts would not be appropriate. Severe internal injuries can occur if water is forced into body cavities as a result of falling in the water or being near jet thrust nozzle. Normal swimwear does not adequately protect against forceful entry of water into the lower male or female body opening(s).

- Footwear. Some type of lightweight, flexible foot protection is recommended. This will help reduce possible injury, should you step on sharp underwater objects.

## **Personal Flotation Devices (PFDs)**

Each person on a recreational watercraft must wear a personal flotation device (PFD) at all times. Ensure that these PFDs meet your country's regulations.

A PFD provides buoyancy to help keep the head and face above the water, and to help maintain a satisfactory body position while in the water. Body weight and age should be considered when selecting a PFD. The buoyancy provided by the PFD should support your weight in water. The size of the PFD should be appropriate for the wearer.

Body weight and chest size are common methods used to size PFDs. It is your responsibility to ensure that you have the proper number and types of PFDs on board to comply with federal and local regulations, and that your passenger knows where they are and how to use them.

## **Additional Recommended Equipment**

It is recommended that you acquire additional equipment for safe, enjoyable cruising. This list, which is not all inclusive, includes items you should consider acquiring.

- Local map
- First aid kit
- Tow rope
- Flares
- Mooring cords.

**A cellular telephone in a waterproof bag or container has also been found to be beneficial to boaters when in distress or just for contacting someone on shore.**

# **PRACTICE EXERCISES**

It is always a good idea to practice and get familiar with all controls, functions and handling characteristics of your watercraft before venturing on the water.

Always secure the tether cord to the engine cut-off switch and the clip to your PFD or a wrist strap.

## **Where to Practice Exercises**

Find a suitable area to practice the exercises. Ensure the area meet the following requirements:

- No traffic
- No obstacles
- No swimmers
- No current
- Ample space to maneuver
- Water depth is adequate

## **Practice Exercises**

Practice alone the following exercises.

### **Turning**

Practice turning in circles in both directions at slow speed. When comfortable with the exercise, increase difficulty by making some figure 8. When this is mastered, repeat the above exercises but at increased speed.

### **Stopping Distances**

Practice stopping the watercraft in a straight line at different speeds. Remember, water drag is the main factor which reduces the watercraft speed and thus the stopping distance.

**NOTE:** The watercraft speed, load, current and wind also play an important role in affecting stopping distances.

### **Avoiding an Obstacle**

Practice obstacle avoidance (choose a virtual point on the water) by steering the watercraft and maintaining throttle. Repeat exercise, but this time release throttle while turning.

**NOTE:** With this exercise, you will learn that you need throttle to steer the watercraft in a different direction.

### **Docking**

**NOTE:** You can use the start and stop button to reduce the docking speed.

Practice docking using the throttle and steering to become familiar with the response of the watercraft and to develop good control skills.

### **Important Factors Not to Neglect**

In addition, always remember that the following conditions have a direct impact on how your watercraft will behave and respond to different inputs:

- Loads
- Currents
- Wind
- Water conditions

Make sure to be alert to these conditions, and adapt accordingly. If possible, practice further in these conditions. For delicate maneuvers, the best advice is always to try to reduce your speed to minimum.

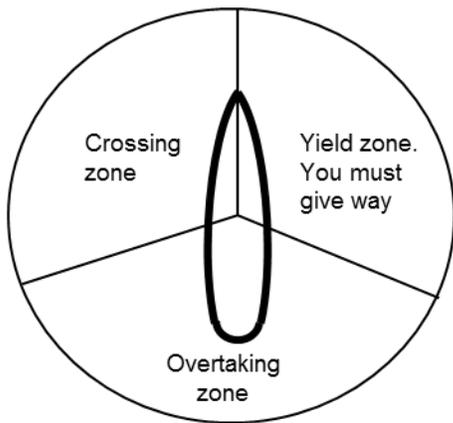
# **NAVIGATION RULES**

## **Operating Rules**

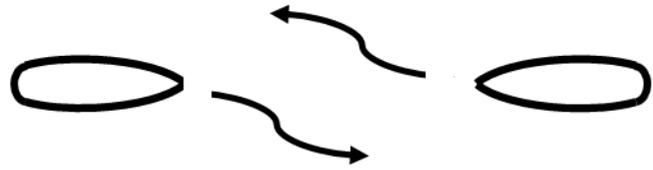
Operating a watercraft can be compared with driving on unmarked highways and roads. To prevent collisions or avoid other boaters, a system of operating rules must be followed. It's not only common sense, it's the law!

Generally keep to your right and safely avoid collisions by keeping a safe distance from other watercraft, boats, people and objects.

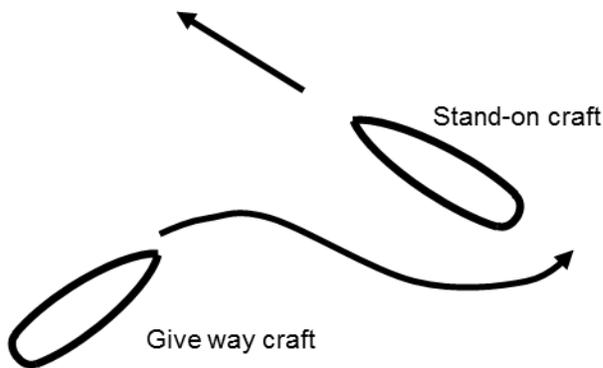
The following illustration identifies different parts of a boat that are used as directional reference points, the bow being the front of the boat. The port side of boat (left side) is visually identifiable by a RED light off the bow, and the starboard side (right side) by a GREEN light.



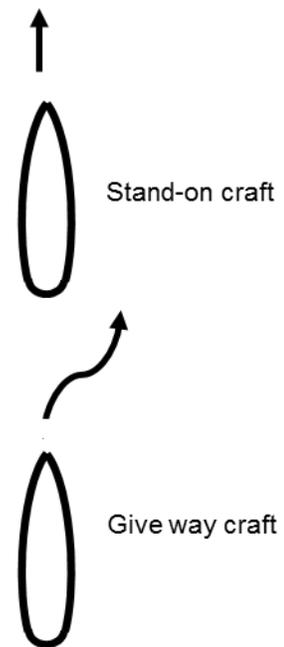
**Right of way rule**



**Meeting Head-On or Nearly So**  
 Situation: Crafts generally pass portside. However, crafts may pass starboard to starboard if proper signals are given.



**Crossing Situations:** Give right of way to craft ahead and to your right. Never cross in front of a boat.



**Overtaking Situations:** Give right of way to other craft and keep clear.

## **Navigation System**

Navigational aids, such as signs or buoys, can assist you in identifying safe waters. Buoys will indicate whether you should keep to the right (starboard) or to the left (port) of the buoy, or to which channel you can continue. They may also indicate whether you are entering a restricted or controlled area such as a no wake or low speed zone. They may also indicate hazards or pertinent boating information. Markers may be located on shore or on the water. They can also indicate speed limits, no power craft or boating, anchorage and other useful information. (The shape of each type of marker will provide assistance).

Make sure you know and understand the navigation system applicable to the waterways where you intend to use the watercraft.

## **Collision Avoidance**

Do not release the throttle when trying to steer away from an obstacle. Engine power and jet pump thrust is required to steer the watercraft.

Always keep a constant lookout for other water users, other boats or objects, especially when turning. Be alert for conditions that may limit your visibility or block your vision of others.

Respect the rights of other recreationists and/or bystanders and always keep a safe distance from all other watercraft, boats, people and objects.

Do not wake or wave jump, ride the surf line or attempt to spray or splash others with your watercraft. You may misjudge the ability of the watercraft or your own riding skills and strike a boat, watercraft or person.

This watercraft has the capability of turning more sharply than other boats, however, unless in an emergency, do not negotiate sharp, high speed turns. Such maneuvers make it hard for others to avoid you or understand where you are going. Also, you and/or your passenger(s) could be thrown from the watercraft.

## FUELING

Always verify fuel level before use and during the ride.

Always stop the engine before fueling and never allow anyone to remain on the watercraft while fueling. Always remember that fuel is flammable and explosive under certain conditions. Do not smoke or allow open flames or sparks in the vicinity.

### **WARNING**

Fuel is flammable and explosive under certain conditions. Always work in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity.

### **WARNING**

Follow these safe boating fueling instructions carefully:

- Turn off engine.
- Do not insert the spout too far in filler neck.
- Pour fuel slowly so that air can escape from the tank and prevent fuel flow back. Be careful not to spill fuel.
- Fully tighten fuel tank cap.

### **WARNING**

- Always stop the engine before refueling.
- Fuel is flammable and explosive under certain conditions.
- Always work in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity.
- Fuel tank may be pressurized, turn cap slowly when opening.
- When fueling, keep watercraft level.
- Do not overfill or top off the fuel tank and leave watercraft in the sun. As temperature increases, fuel expands and might overflow.
- Always wipe off any fuel spillage from the watercraft. Periodically verify fuel system.

After refueling, always ensure there is no gasoline vapor odor inside the engine compartment.

## **Fuel Requirements**

**NOTICE:** Always use fresh gasoline. Gasoline will oxidize; the result is loss of octane, volatile compounds, and the production of gum and varnish deposits which can damage the fuel system.

Even if gasoline containing greater than ten volume percent ethanol is readily available, the US EPA has issued a prohibition against the use of gasoline containing greater than 10 vol% ethanol that applies to this product. The use of gasoline containing greater than 10 vol% ethanol with this engine may harm the emission control system and will void the warranty.

Use of fuel containing alcohol above the percentage specified by government regulations is not recommended and can result in the following problems in the fuel system components:

- Starting and operating difficulties.
- Deterioration of rubber or plastic parts.
- Corrosion of metal parts.
- Damage to internal engine parts.

Inspect frequently for the presence of fuel leaks or other fuel system abnormalities if you suspect the presence of alcohol in gasoline exceeds the current government regulations.

Alcohol blended fuels attract and hold moisture which may lead to fuel phase separation and can result in engine performance problems or engine damage.

## Recommended Fuel

- RECOMMEND PREMIUM UNLEADED GASOLINE 91 PUMP OCTANE OR HIGHER
- MINIMUM UNLEADED GASOLINE 86 PUMP OCTANE OR HIGHER

NOTE: Do not mix oil with fuel.

**NOTICE:** Never experiment with other fuels. Engine or fuel system damages may occur with the use of an inadequate fuel.

# ON-PRODUCT LABELS

## Watercraft Safety Labels

The following labels are on your watercraft. If missing or damaged, the labels can be replaced free of charge. See an authorized AQUANAMI dealer. Please read the following labels carefully before operating this watercraft.

**NOTE:** In the event of any discrepancy between this guide and the watercraft, the safety labels on the watercraft have precedence over the labels in this guide.

 <b>WARNING</b>	
<b>To reduce the risk of SEVERE INJURY or DEATH:</b>	
<b>WEAR A PERSONAL FLOTATION DEVICE (PFD).</b> All riders must wear a Coast Guard approved PFD.	
<b>WEAR PROTECTIVE CLOTHING.</b> Severe internal injuries can occur if water is forced into body cavities as a result of falling into water or being near jet thrust nozzle. All riders must wear a wet suit bottom or clothing that provides equivalent protection.	
<b>KNOW BOATING LAWS:</b> The boat is recommended only for operators 16 and older with valid motor vehicle license. Adults must supervise use by minors. You must know and follow all federal, state and local boating laws.	
<b>ATTACH ENGINE SHUT-OFF CORD (LANYARD)</b> to wrist and keep it free from obstacles so that engine stops if operator falls off. After riding, remove cord from the boat to avoid unauthorized use by children or others.	
<b>TAKE EARLY ACTION</b> to avoid collisions. Remember boats do not have brakes. Operate defensively at safe speeds and keep a safe distance away from people, objects, and other boats. See Owner's Manual for steering and operation of the boat.	
<b>RIDE WITHIN YOUR LIMITS AND AVOID AGGRESSIVE MANEUVERS</b> to reduce the risk of loss of control, ejection, and collision. This is a high performance boat – not a toy. Sharp turns or jumping wakes or waves can increase the risk of back/spinal injury (paralysis), facial injuries, and broken legs, ankles, and other bones. Do not jump wakes or waves.	
<b>DO NOT APPLY THROTTLE WHEN ANYONE IS AT REAR OF BOAT.</b> Turn engine off or keep engine at idle. Water and/or debris exiting jet thrust nozzle can cause severe injury.	
<b>KEEP AWAY FROM INTAKE GRATE</b> while engine is on. Items such as long hair, loose clothing, or PFD straps can become entangled in moving parts resulting severe injury or drowning.	
<b>STOP ENGINE BEFORE REMOVING DEBRIS FROM JET INTAKE</b> on bottom of hull.	
<b>DO NOT TRAVEL FAR AWAY</b> without another watercraft or boat with you.	
<b>NEVER RIDE AFTER CONSUMING DRUGS OR ALCOHOL.</b>	

*Label 1*



## WARNING

- Severe internal injuries can occur if water is forced into body cavities as a result of being near jet thrust nozzle.
- Wear a wetsuit bottom or clothing that provides equivalent protection.

*Label 2*

- RECOMMEND PREMIUM UNLEADED GASOLINE 91 PUMP OCTANE OR HIGHER
- MINIMUM UNLEADED GASOLINE 86 PUMP OCTANE OR HIGHER

*Label 3*



## WARNING

- GASOLINE IS HIGHLY FLAMMABLE AND EXPLOSIVE:**
- Stop engine before refueling. Refuel in well ventilated area.
  - Never refuel while smoking, or around sparks or flames.
  - Avoid spilling gasoline. Wipe up spilled gasoline immediately.
  - Remove cover to ventilate fuel vapors from engine compartment before starting engine.
  - Do not start engine if there is a fuel leak or a loose electrical connection.

*Label 4*

## CAUTION

### SAFETY WARNING

**Powerboarding can be dangerous and physically demanding. The User of this product should understand that participating in powerboarding may involve serious injury or death. Observe the following safety standards when using the product:**

- Get paddlesports instruction from a licensed or certified instructor.
- Obtain certified first aid and rescue training and carry first aid and rescue equipment.
- Always wear a nationally approved personal floatation device.
- Always wear a helmet where appropriate.
- Dress appropriately for weather conditions; cold water and/or weather can result in hypothermia.
- Check your equipment prior to each use for signs of wear or failure.
- Never paddle alone.
- Do not paddle in flood conditions.
- Be aware of appropriate river water levels, tidal changes, dangerous currents and weather changes.
- Scout unfamiliar waters; portage where appropriate.
- Do not exceed your paddling ability; be aware of your limitations.
- Consult your physician prior to beginning paddlesport training.
- DO NOT use alcohol or mind altering drugs prior to or while using this product.
- Follow the manufacturer's recommendations for the use of this product.
- If additional outing is added to this craft, use manufacturer approved materials only, do not impair entry or exit access.

### **READ OWNER'S INFORMATION PACKAGE PRIOR TO USING THIS PRODUCT.**

**The use of this product acknowledges both an understanding and an assumption of the risk involved in powerboarding.**

#### *Label 5*

### AFTER OPERATION

#### **After removing from the water:**

- Flush drive system and hull with fresh water.
- Connect a garden hose to flush heat exchanger and exhaust system for 15 seconds.
- Start the engine for 10 seconds to drain any left over water in the exhaust system. Do not run the engine over 4000 rpm on land.

#### *Label 6*

## Compliance Labels

**THIS BOAT IS NOT REQUIRED TO COMPLY WITH THE FOLLOWING U.S.COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION:**

- Display of Capacity Information
- Safe Loading
- Flotation
- Fuel System
- Powered Ventilation

**AS AUTHORIZED BY U.S. COAST GUARD GRANT OF EXEMPTION (CGB 11-004-1)**  
AQUANAMI, LLC

*Label 7*

**AQUANAMI, LLC** 

**Model: JetAngler**

**Category: D**

**MAX.**  **= 2**

**MAX.**  **+**  **= 160 kg**

*Label 8*

 <b>AQUANAMI</b>		<b>EMISSION CONTROL INFORMATION</b>	
THIS MARINE SI ENGINE COMPLIES WITH U.S. EPA EXHAUST REGULATIONS FOR 2015.			
ENGINE FAMILY: FAQNM.2952GA			
SPARK PLUG: NGK DR8EA		SPARK PLUG GAP: 0.6 - 0.7 mm	
DISPLACEMENT: 0.295 L		FUEL: Unleaded Gasoline	
IDLE SPEED: 1600 ± 200 rpm		POWER: 11.0 kW	
EXHAUST EMISSION CONTROL: EM, ECM			
SEE OPERATOR'S GUIDE FOR MAINTENANCE SPECIFICATIONS.			

*Label 9*

Model: IP75    Serial No:	
Model Year: 2015	<b>CE</b>
<b>4 STROKES</b>	
Max Power: 11kW	Max RPM: 6000
Aquanami, LLC., 809 Grandview Dr., Hampstead, NC, USA.	

*Label 10*

## PRE-RIDE INSPECTION

### **WARNING**

Perform a pre-ride inspection before each ride to detect potential problems during operation. The pre-ride inspection can help you monitor wear and deterioration before they become a problem. Correct any problems that you discover to reduce the risk of a breakdown or crash.

Before performing the pre-ride inspection, read and understand the CONTROLS section.

### **What to Do Before Launching the Watercraft**

### **WARNING**

Engine should be off and the tether cord cap should always be removed from the engine cut-off switch prior to verifying any of the following points. Only start watercraft once all items have been checked and operate properly.

Check the items listed in the following table before launching the watercraft

ITEM	TO DO	Check
Start and Stop buttons	Check operation.	
Safety Lanyard	Check operation.	
Throttle	Check operation.	
Steering system	Check operation.	
Exhaust pipe cooling	Check by-pass outlet. Water mist/drops should come out exhaust by-pass outlet.	
Bilge plugs	Ensure plugs are secured.	
Battery	Inspect cables and retaining fasteners. Ensure good condition and fully charged.	
Fuel tank	Check/refill.	
Engine compartment	Check if any water exists.	
	Check if any signs of water leak.	
	Check fuel line connections for tightness.	
	Verify for any fuel leak/odor as well as oil and coolant leaks.	
	Check any loosen parts.	
Engine oil level	Check/refill.	
Engine coolant	Check/refill.	
Heat Exchanger condition	Check	
Carburetor	Periodically drain water or contaminated fuel from the carburetor bowl by loosening the carburetor drain	
Fuel water separator bottle	Periodically drain water or contaminated fuel from the bottle.	
Engine breathing oil retainer	Periodically drain the engine breathing oil retainer bottle to clean oil/water residue.	
Jet pump water intake	Inspect/clean.	
Jet pump water intake seal	Inspect any damage or leak.	
Hull	Inspect.	
Dry storage compartment covers	Ensure they are closed and properly sealed.	

### **Engine Start/Stop Button and Safety Lanyard**

Make sure that both switches operate properly. Start engine and stop it using each switch individually. Lanyard could be securely attached to the kill switch post. It shuts electric system and engine off when being pulled off its post.

## **WARNING**

- Should the stop/start button not work properly, refer to an authorized Aquanami dealer immediately. Fail to do so may result in SEVERE INJURY OR DEATH.
- Should the safety lanyard be loose or not work properly, replace it immediately in order to avoid unsafe use.

### **Throttle**

Check the throttle lever for free and smooth operation. It should return to its initial position immediately after it is released.

## **WARNING**

Check throttle lever operation before starting the engine.

### **Steering System**

Check steering operation for free movement with the assistance of another person. When the steering handle is in the center position, the jet pump nozzle should be in the straight ahead position. Ensure the jet pump nozzle pivot easily.

## **WARNING**

- Check steering handle and corresponding steering nozzle operation before starting the engine.
- Never turn steering handle while someone is nearby the rear of the watercraft. Keep away from steering moving parts.

### **Exhaust Pipe Cooling**

**CAUTION:** To ensure it is properly working, check by-pass outlet. Water mist/drops should come out exhaust by-pass outlet. If the exhaust from the by-pass is not wet, stop engine and consult your AQUANAMI Dealer. The exhaust pipe is cooled by the

water from the jet pump. If the water flow from jet pump to exhaust pipe is blocked, the exhaust pipe and connecting components could be damaged.

**CAUTION:** Never run the engine without supplying water to the cooling system when watercraft is out of water. If out of water, level the craft. Install a garden hose to the flushing connector, which is also the cooling water exit port when watercraft operates on water.

**CAUTION:** Failure to flush cooling system, when engine is out of water, may severely damage the exhaust system.

**CAUTION:** Never run engine longer than 1 minute when watercraft is out of water. Drive line seal has no cooling when watercraft is out of water.

### **Bilge Plugs**

Should water be present in the bilge, press manual bilge pump switch to start the electric bilge pump. If some water remains in bilge, tilt the watercraft to the rear and unscrew drain plugs to completely empty the bilge. Ensure all plugs securely closed before operating your watercraft.

### **Battery**

Pay attention to battery “+ and “-” signs. Ensure the battery is correctly connected, tighten and secured.

#### **WARNING**

The battery must always be fully charged and in good condition. Loss of battery power may leave you stranded. Never operate the watercraft if the battery does not have sufficient power or if it shows any other signs of decreased power.

### **Fuel Tank**

With the watercraft horizontal, fill the fuel tank. Refer to FUELING section for checking fueling.

### **Engine Compartment**

Check if any water exists. Check if any signs of water leak. Check fuel line connections for tightness. Verify for any fuel leak/odor as well as oil and coolant leaks. Check any loosen parts.

### **WARNING**

Should any leak or gasoline odor be present, do not start the engine. Refer to an authorized Aquanami dealer before use.

### **Engine Oil Level**

Ensure oil level is appropriate as specified in LIQUIDS section. Check for oil leaks on engine and in engine compartment.

### **Engine Coolant**

Ensure coolant tank is full as specified in LIQUIDS section. Check for coolant leaks on engine, in bilge and from ride plate.

### **Check Carburetor**

Water or contaminated fuel in carburetor bowl will cause engine suddenly stop when you depress throttle lever, or you may not be able to start engine. Periodically drain water or contaminated fuel from the carburetor bowl by loosening the carburetor drain screw. Use a cup to collect the drained liquids. Ensure the drain screw closed after cleaning.

### **Check Fuel Water Separator Bottle**

Periodically drain water or contaminated fuel from the separator bottle. Use a cup to collect the drained liquids. To drain the contaminated fuel in the separator bottle,

simply pull off the hose from the middle nozzle of the bottle, and let the contaminated fuel drain out from the bottom nozzle through the hose to a cup. Ensure reconnect the drain hose back to the middle nozzle of the separator bottle.

### **Check engine breathing oil retainer**

Check the bottle periodically and clean any oil residue to keep engine breathing freely. To drain the oil/water in the retainer bottle, simply pull off the hose from the middle nozzle of the bottle, and let the water/oil drain out from the bottom nozzle through the hose to a cup. Ensure reconnect the drain hose back the middle nozzle of the oil retainer bottle.

### **Jet Pump Water Intake**

Check the seal between the jet pump intake and the ride plate. A damaged seal will let air get into the jet pump. The jet loses its propulsion force.

Although the jet pump is equipped with weed cutter. It is still recommended that check jet pump. Remove weeds, shells, debris or anything else that could restrict the flow of water and damage cooling system or propulsion unit. Clean as necessary. If any obstruction can not be removed, refer to an authorized Aquanami dealer for servicing.

Inspect leading edges of the impeller, if they have nicks or bends performance will be greatly reduced.

### **WARNING**

Do not inspect the water intake or intake grate without removing the lanyard from the post.

### **Hull**

Inspect hull for cracks or damage. Inspect hull for cracks and any possible leaks.

Check all seals in good conditions. Lift front end of watercraft to completely drain bilge through the bilge drain plug.

## What to Do After Launching the Watercraft

Check the item listed in the following table after launching the watercraft and before going for a ride.

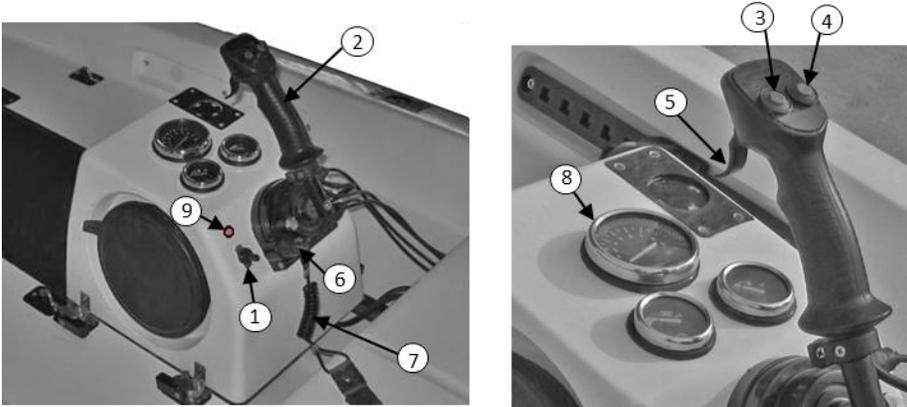
ITEM	TO DO	Check
Gauges	Check operation.	

### Gauges

Press engine START/STOP button and install the tether cord capon the engine cut-off switch. Ensure all indications come on properly.

***WATERCRAFT  
INFORMATION***

## CONTROLS



1. **Main Switch**: The main switch turns on/off power supply from battery to the watercraft electric system. Engine can not be started when the main switch is off. Always turns off the main switch when the watercraft is not in operation to prevent battery drain.
2. **Steering handle**: The steering handle controls the direction of the watercraft. Turning the steering handle to the right steers the watercraft to the right and inversely.

### **WARNING**

- Check steering handle and corresponding steering nozzle operation before starting engine.
- Never turn steering handle while someone is nearby rear of watercraft.
- Keep away from steering moving parts (nozzle, linkage etc.).

3. **Start Button**: To start engine, depress and hold the start button. Release immediately after engine is started.
4. **Stop Button**: To stop engine, fully release throttle lever then depress the stop button. Remember to disconnect safety lanyard from its post.

5. **Throttle Lever**: When the throttle lever is pulled, the watercraft accelerates. When fully released, engine automatically slows down to idle speed and watercraft is gradually slowed down by water drag.

To increase or maintain watercraft speed, pull on the throttle lever with your finger. To decrease watercraft speed, release the throttle lever.

The throttle lever is spring loaded and should return to rest position (idle) when not pressed.

 **WARNING**

Directional control is reduced when the throttle is released and lost when engine is off.

6. **Engine Cut-Off Switch**: To allow engine starting, the tether cord cap must be securely snapped onto the engine cut-off switch. To stop engine, pull the tether cord cap from the engine cut-off switch.

 **WARNING**

Always attach the tether cord clip to the operator's personal flotation device (PFD) or wrist (wrist strap required).

7. **Engine Tether Cord (Safety Lanyard)**: Attach the engine Tether Cord to operator's life vest or wrist so that the engine stops if the operator falls off. Always disconnect safety lanyard when watercraft is not in operation in order to prevent accidental engine starting or to avoid unauthorized use by children or others or theft.

**NOTE:** Leaving the safety lanyard on its post when engine is not running will slowly discharge the battery.

 **WARNING**

While engine can be stopped using the engine stop button, good habits recommend that the Tether Cord also be disconnected when stopping.

8. **Information Gauges**: When tether cord is plugged in and the start button is depressed once, the information gauges read engine RPM, fuel level and battery life. The engine run hour gauge is inside engine compartment.

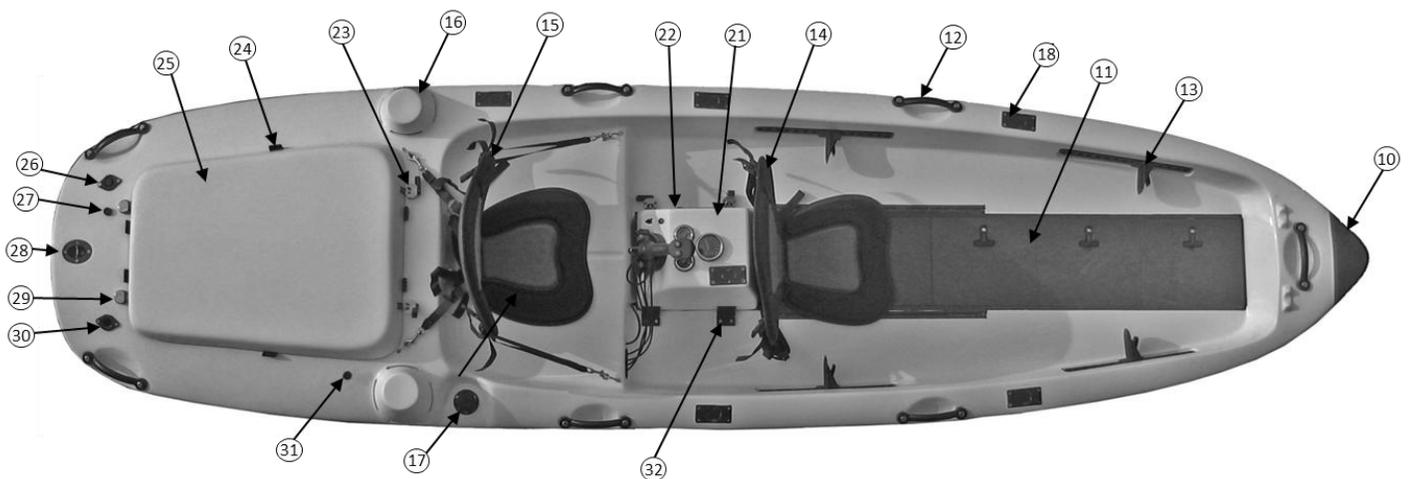
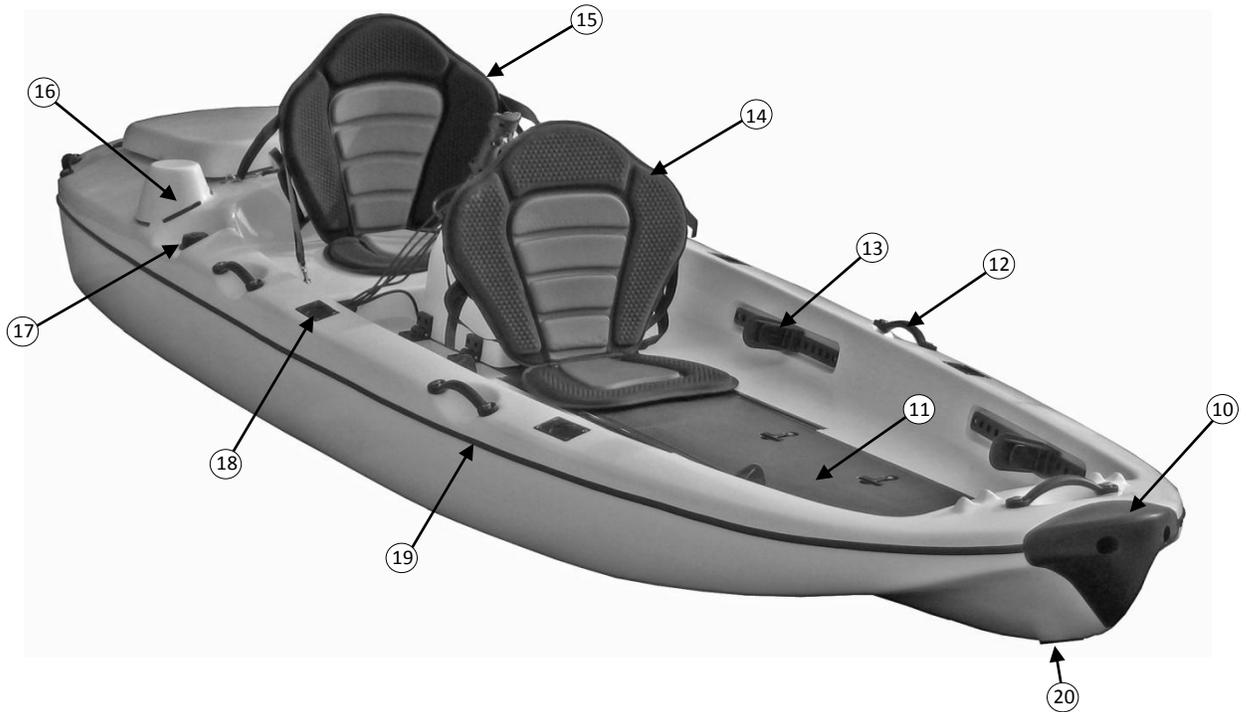
Once stop button is depressed or Tether Cord is pulled off, all the gauges will be turned off.

 **WARNING**

- The fuel level indicator may provide false reading if the watercraft is not leveled.
- After depressing start button, the information gauges are on, which will drain battery if the engine is not running.
- Always remove Tether Cord when the engine is not running. Leave Tether Cord on its post will drain battery dead when engine is not running.

9. **Manual Bilge Water Pump Switch**: The bilge water pump switch is a push button switch to turn on the electric bilge pump manually located inside engine compartment, to evacuate water from the bilge.

## EQUIPMENT



10. **Rubber Pumper**: The rubber pumper provides protection to hull.

11. **Under Deck Storage**: Open storage covers to access the long and spacious under deck storage.

12. **Handle**: The moving handle can be used to lift the watercraft. It provides a handhold for the operator and a passenger to hold on to when riding.
13. **Foot Brace**: The foot brace provides foot support.
14. **Passenger Seat**: The soft passenger seat.
15. **Driver Passenger Seat**: The soft driver seat.
16. **Baffled Air Intake**: The baffled air intake allows air into the bilge for ventilation and air supply. It stops water entering engine compartment during operation, and prevents water from getting into engine compartment when the watercraft is capsized. However it is not water proof.

**CAUTION:** If the water gets inside the bilge under certain circumstances, it may cause severe damage to internal parts of the engine.

17. **Fuel Tank Cap**: Unscrew the cap counter clockwise. After fueling, reinstall cap and fully tighten.

### **WARNING**

- Always stop the engine before refueling. Fuel is flammable and explosive under certain conditions.
- Always work in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity.
- Fuel tank may be pressurized, turn cap slowly when opening.
- When fueling, keep watercraft level.
- Do not overfill or top off the fuel tank and leave watercraft in the sun. As temperature increases, fuel expands and might overflow.
- Always wipe off any fuel spillage from the watercraft.
- Periodically verify fuel system.

18. **Accessory Mounting Base**: The accessory mounting base can be used to install accessories and equipment.

19. **Hull Joint Seam Tape**: The hull joint seam tape provides the protection for watercraft hull.
20. **Rear Eyelet**: Eyelets can be used for mooring and as tie-down points when trailering your watercraft.
21. **Control Station**: The control station is where steering handle, main switch, cut-off switch, start/stop switches and information gauges located. It also provides the dry storage space for fire extinguisher and safety devices.
22. **Fire Extinguisher**: The control station provides the storage area for fire extinguisher (not supplied with the watercraft).
23. **Engine Compartment Cover Lock**: Turn the lock handle and pull the lock pin to open the engine compartment cover.
24. **Engine Compartment Cover Rubber Guard**: The rubber guard secures the engine compartment cover and protects the hull from scratch.
25. **Engine Compartment Cover**: The engine compartment cover must be closed and secured when the watercraft is in operation. **NOTE**: The engine compartment cover does not float on water.

 **WARNING**

- Components inside engine compartment may be hot.
- When starting or operating the engine, do not touch any electrical part.
- Never leave any object, rag, tool, etc., in the engine compartment or in the bilge.

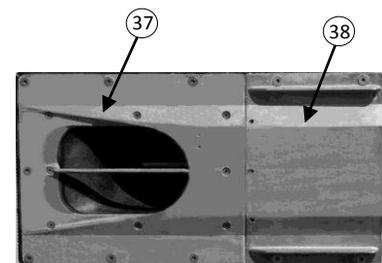
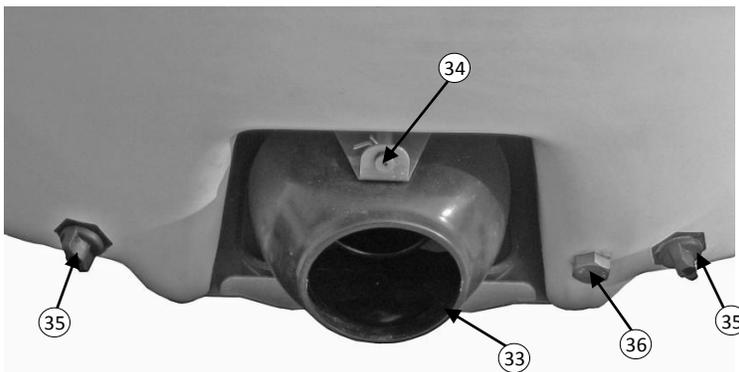
26. **Heated Water Outlet/Flush Garden Hose Connector**: The heated water outlet/flush garden hose connector has three functions:
  - a. Fresh cooling water from jet pump flows through heat exchanger, then exits from this outlet when the watercraft is in operation;

- b. Use this connector to flush the heat exchanger, cooling water passage and exhaust system during cleaning;
- c. Provide cooling water for engine and exhaust system when running the engine out of water.

**⚠ WARNING**

Do not block the heated water outlet when the watercraft is in operation. Restriction of the heated water flow will damage the engine.

- 27. **Exhaust By-Pass Outlet:** The engine exhaust emits from this exhaust by-pass outlet at idle speed.
- 28. **Rear Eyelet:** Eyelet can be used for mooring and as tie-down points when trailering your watercraft.
- 29. **Engine Compartment Cover Fixed Lock:** It holds engine compartment cover in place.
- 30. **Bilge Pump Water Outlet:** Water from bilge pump exits here.
- 31. **Fuel Tank Vent:** It vents air out from fuel tank when pressure builds up in the tank as temperature rises. This is a one way path, out only, no in. The fuel tank breathing-in check valve is inside the engine compartment.
- 32. **Hinge:** It allows the control station to be turned over to access the underdeck storage.



33. **Steering Nozzle**: Steering nozzle turns left and right by operating steering handle.

 **WARNING**

- Check steering handle and corresponding steering nozzle operation before starting.
- Never start engine and never turn steering handle while someone is nearby rear of watercraft.
- Keep away from steering moving parts (nozzle, linkage etc.).

34. **Steering Nozzle Linkage**: The steering nozzle pivoting linkage turns steering nozzle left and right by operating steering handle.

35. **Bilge Drain Plug**: Unscrew drain plug whenever watercraft is on the trailer. This will allow water accumulated in the bilge to be evacuated and helps to reduce condensation. Should water be found in the bilge, it can be easily drained by opening the drain plugs when engine is off and watercraft is out of the water. It is suggested to drain bilge when the watercraft is on ramp.

**CAUTION:** Always take the watercraft out of the water prior to open drain plugs. Make sure the drain plugs are properly secured prior to launching the watercraft in the water.

36. **Oil Drain Plug**: Make sure that engine is off and warm, but NOT HOT. Use a wrench to open the oil drain plug. Ensure to use proper oil pan to collect the used oil to protect environment.

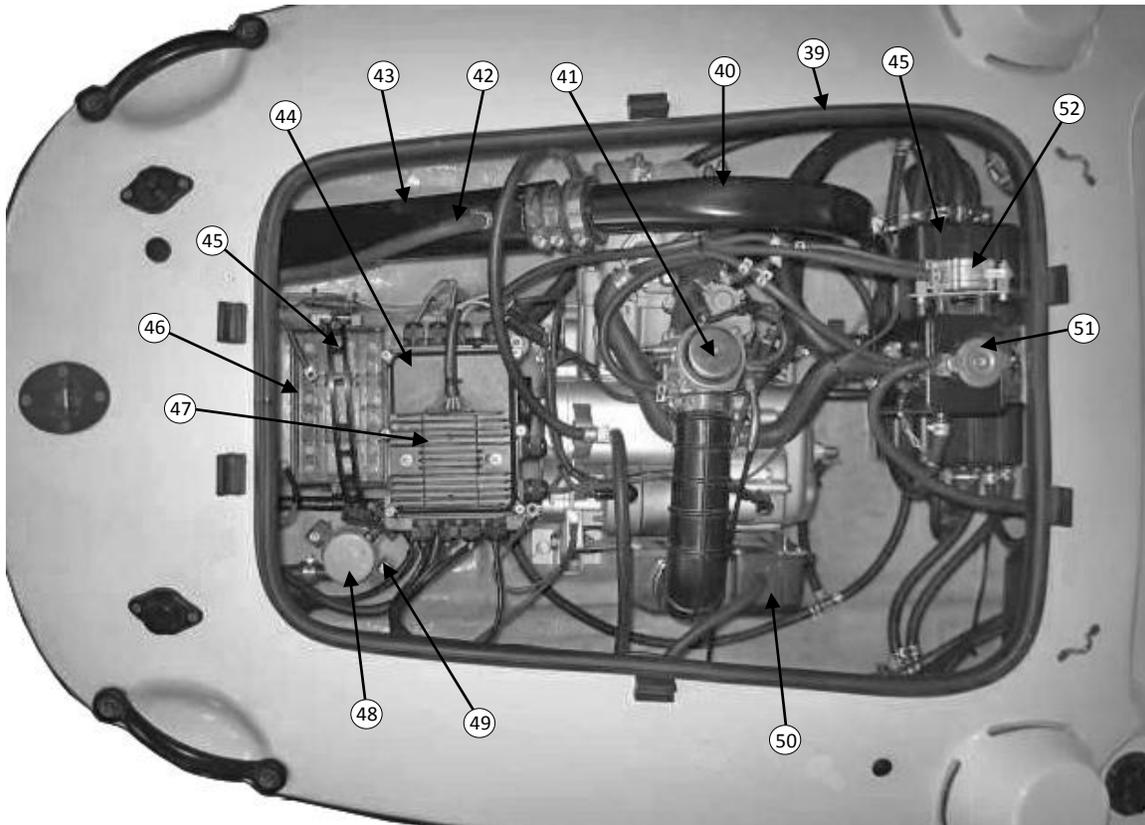
**CAUTION:** Make sure the drain plug is properly secured and sealed after oil change. No water leak!

37. **Jet Pump Water Intake Grate**: The water is drawn in by the impeller through this opening. The water intake grate minimizes the entry of foreign objects into the propulsion system.

 **WARNING**

Keep away from intake grate while engine is on. Items such as long hair, loose clothing or personal flotation device straps could potentially become entangled in moving parts resulting in severe injury or drowning.

38. **Ride Plate**: The ride plate can be adjusted by inserting a pair of shims between the ride plate and the hull. This allows the rider to adjust the height that the front of the watercraft is out of the water. A pair of 5 mm shims and a pair of 10 mm shims are supplied. The 10 mm shims lower the watercraft nose the most, but the watercraft goes slower with the 10 mm shims.



**39. Engine Compartment Opening Seal:** The seal fills the gap between engine compartment cover and the engine compartment opening.

**40. Exhaust pipe:** Cooling water flows through the double walled exhaust pipe, enters the water box.

**41. Carburetor:** It regulates the flow of air and fuel mix into the engine cylinder.

**42. Exhaust By-Pass Hose:** The engine exhaust flows through this exhaust by-pass hose at idle speed.

**43. Water Box/Muffler:** It reduces the amount of noise emitted by the exhaust of the engine.

44. **Electronic Control Module**: It holds CDI and other electronic components.
45. **Battery Tie**: It holds the battery in place.
46. **Battery**: Ensure to connect the battery with correct “+” and “-” terminals. Refer to MAINTENANCE section for battery charging and maintenance.
47. **Electric Regulator**: It maintains the voltage of the engine generator power.
48. **Bilge Pump**: Bilge pump draws water from bilge out when water level sensor detects water or when the bilge pump manual switch is pressed.
49. **Bilge Pump Sensor**: It detects water in bilge and starts bilge pump when water level reaches about 1.5 inches. Make sure the sensor surface is clean of soil, oil and salt. Always clean the sensor after use on salt water.
50. **Air Induct Box and Spark Arrestor**: It traps water from entering carburetor and contains the spark arrestor.
51. **Coolant Fill/Pressure Cap**: It regulates engine coolant pressure and provides access to add coolant.

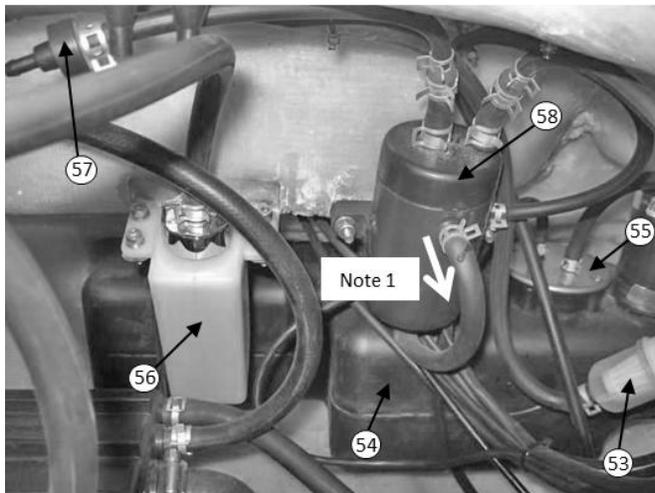
**CAUTION:**

- Slowly add coolant until it is full.
- Add coolant after the first time use.

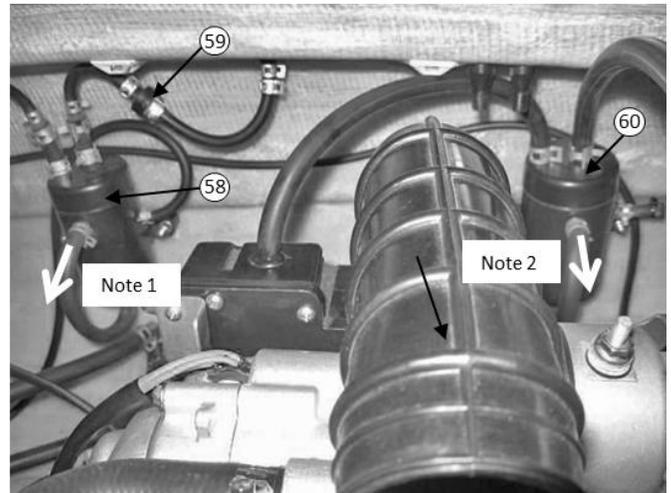
 **WARNING**

- Check coolant frequently, especially after first time use.
- Never add coolant when engine is hot.
- Coolant is under pressure when engine is hot. Open coolant bottle cap may cause severe burn and injury when engine is hot.

52. **Fuel Pump**: It pumps fuel from fuel tank to carburetor.



Note 1: Disconnect the hose as shown to drain water/oil. Reconnect the hose back after draining.



Note 2: Disconnect the hose as shown to drain water/fuel. Reconnect the hose back after draining.

### **53. Fuel filter.**

### **54. Fuel Tank.**

**55. Fuel pick-up and fuel sensor assembly:** The fuel pick up hose and fuel sensor are inside the fuel tank.

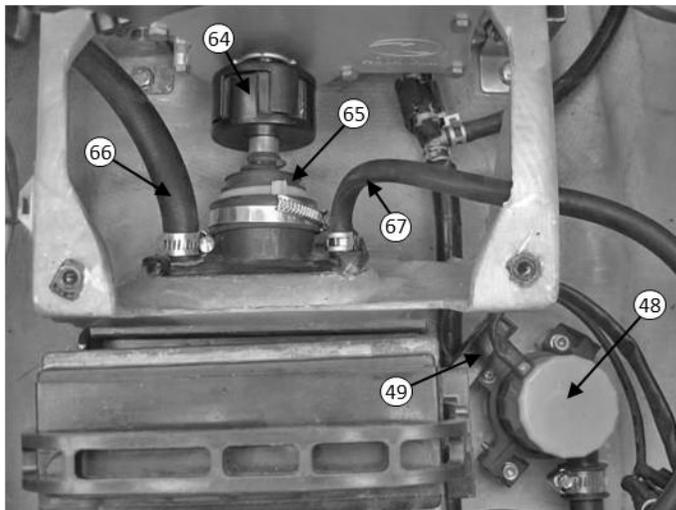
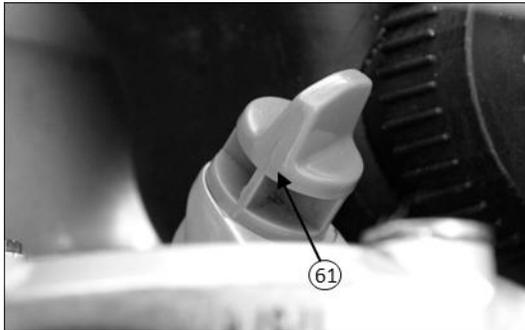
**56. Engine Coolant Expansion Bottle:** When engine temperature rises, the engine coolant expands, the expanded coolant flows to the expansion bottle. When engine cools down, the coolant in the expansion bottle is drawn back to the engine.

**57. Fuel Tank Breath-In Check Valve:** It allows air to flow into fuel tank.

**58. Fuel Water Separator:** It retains water or contaminated fuel. Check the bottle periodically and drain water or contaminated fuel to keep engine run with clean fuel. To drain water or contaminated fuel in the separator bottle, simply pull off the hose from the middle nozzle of the bottle, and let the contaminated fuel drain out from the bottom nozzle through the hose to a cup. Reinstall the hose back after draining.

**59. Fuel Tank Vent Check Valve:** It vents air out from fuel tank when pressure builds up in the tank as temperature rises. This is a one way valve.

**60. Engine Breathing Oil Retainer:** It retains oil mist and oil from engine breathing path. Check the bottle periodically and clean any oil residue to keep engine breathing freely. To drain the oil/water in the retainer bottle, simply pull off the hose from the middle nozzle of the bottle, and let the water/oil drain out from the bottom nozzle through the hose to a cup. Reinstall the hose back after draining.



61. **Engine Oil Filling Cap and Oil Dipstick:** It allows adding oil in the engine when required. Dipstick indicates the engine oil level.

62. **Carburetor Drain Screw:** Use a flat screw driver to drain water or contaminated fuel in carburetor bowl. Ensure to close the drain screw after cleaning.

63. **Carburetor Drain Hose:** Use a cup to drain water or contaminated fuel.

64. **Drive Shaft Damper and Coupling.**

65. **Drive Shaft to Hull Seal Boot.**

66. **Fresh Water Supply Hose:** It supplies fresh water from jet pump to cool heat exchanger and exhaust system.

67. **Siphon Hose:** It connects siphon pump head to jet pump. Siphon pump head evacuates water in bilge by the low pressure generated in jet pump. Check and clean the vacuum siphon pump head, remove any blocking objects periodically.

# **BREAK-IN PERIOD**

## **Operation During Break-In Period**

Your watercraft is equipped with a 4 stroke closed loop water cooled engine. Having a break-in period is crucial to its proper performance and the product life. The engine break-in period allows various components of the engine to wear and polish themselves to the correct operation clearances and conditions. The scheduled oil change during the break-in period is also required. It will prevent excessive wear and damage to the components. Failure to perform the required break-in period may significantly handicap your craft performance, shorten the product life. In certain circumstances, it may void your craft warranty.

A break-in period of 6 operating hours is recommended before running the watercraft at sustained full throttle. During this period, maximum throttle should not exceed 1/2 to 3/4 opening. However, brief full acceleration and speed variations contribute to a good break-in.

### **NOTICES:**

- Continued wide open throttle accelerations or operation, prolonged cruising speeds are detrimental during the break-in period.
- **YOU MUST CHANGE ENGINE OIL, REPLACE OIL FILTER AFTER FIRST 10 HOURS OPERATION BY AN AUTHORIZED AQUANAMI DEALER!**

It is highly recommended that after the first 10 hours of operation, the watercraft be checked by an authorized Aquanami dealer. This inspection will also provide the opportunity to discuss the unanswered questions you may have encountered during the first hours of operation.

## OPERATING INSTRUCTIONS

### **WARNING**

Always perform the PRE-RIDE INSPECTION before operating this watercraft. Be sure to read the SAFETY INFORMATION and the WATERCRAFT INFORMATION sections.

Should any control or instruction not be fully understood, refer to an authorized Aquanami dealer.

### **Propulsion Principle**

The engine is directly coupled to the drive shaft which, in turn, rotates the impeller. The water is drawn up from the jet pump water intake grate underneath the watercraft, then flows through the impeller to the venturi. The venturi accelerates the water and produces thrust to move the watercraft. By depressing the throttle lever, an operator increases engine speed and therefore watercraft speed.

### **WARNING**

Whenever the engine is to be started, the operator should always be properly sitting on the seat and be wearing protective clothing including a Coast Guard approved PFD and a wet suit bottom.

### **WARNING**

Keep away from intake grate while engine is on. Items such as long hair, loose clothing or personal flotation device straps could potentially become entangled in moving parts resulting in severe injury or drowning.

## Turn Left and Right

Turning the steering handle pivots the jet pump nozzle which controls the watercraft direction. Turning the handle to the left will turn the watercraft to the left and inversely. The throttle should be applied to turn the watercraft.

### **WARNING**

- Throttle should be applied and steering handle turned to change the direction of the watercraft. Unlike a car, a watercraft needs some throttle to turn.
- Practice in a safe area applying the throttle and turning away from an imaginary object. This is a good collision avoidance technique.
- Directional control is reduced when the throttle is released and lost when engine is off.

**CAUTION:** Combustion engines need air to operate; consequently this watercraft cannot be totally water tight. Maneuvers that cause the air intake opening to be under water may cause severe engine problems due to water ingestion.

## Boarding the Watercraft

As with any watercraft, boarding should be done carefully and engine should not be running.

### **WARNING**

- Engine should be OFF when boarding the watercraft. Keep limbs away from jet or intake grate.
- Inexperienced riders should practice how to get aboard close to shore first before venturing into deep water.

## Boarding from a Dock or in Shallow Water

When boarding in shallow water or from a dock, board the watercraft from the side. Ensure there is at least 50 cm (1.5 ft) of water. Once aboard, take the appropriate riding position.

**CAUTION:** Starting the engine or operating the watercraft in shallow water can draw sand, pebbles, or rocks through the jet pump, which might damage the impeller or other pump components.

### **Boarding in Deep Water**

Swim to the side or front of the watercraft. Put your hands on the board and pull yourself up then get on. Once aboard, take the appropriate riding position.

Boarding in deep water is very difficult. Taking kayaking lessons and training is helpful and necessary. Many universities, colleges, kayak tutor schools, kayak rental places offer kayak lessons. You could find them on line.

### **Starting Engine**

Before unloading the watercraft on to water, it can be started for about 20 seconds to verify proper operation.

#### **WARNING**

Before starting the engine, the operator and passenger should always:

- Be properly seated on the watercraft
- Have a firm grip on a handle
- Wear appropriate protective clothing including a PFD approved by local authorities and a wet suit bottom.

### **NOTICES:**

Ensure there is at least 50 cm (1.5 ft) of water when you are onboard prior to starting the engine. Otherwise damage to the impeller or other jet pump components might occur. Do not accelerate abruptly.

- 1) Attach the tether cord clip to your PFD or to the wrist (wrist strap required).
- 2) Firmly grip the handle with your left hand and place both feet on the foot braces.
- 3) Install the tether cord on the engine cut-off switch.

- 4) Depress the engine START button to crank the engine.
- 5) Release engine START button immediately after engine is started.
- 6) If engine fails to start after 15 seconds, wait a few seconds then repeat procedure.

**NOTES:**

- This engine is designed to start with NO need to depress throttle.
- First time use of the watercraft takes longer time or repeated procedures to allow the fuel pump to draw fuel from fuel tank to carburetor first.

**CAUTION:** Do not hold the start button more than 15 seconds to avoid starter overheating. A rest period should be observed between the cranking cycles to let the starter cool down. Be careful not to discharge battery.

**Riding**

Evenly accelerate to increase speed and reach deeper water. Do not apply full throttle until the engine is warm. The safe use and operation of this watercraft is dependent upon the use of proper riding techniques, as well as upon the common sense, good judgment, and expertise of the operator.

 **WARNING**

Do not apply full throttle until the engine is warm, otherwise you may damage engine cylinder and piston.

## **WARNING**

- Never attempt to perform jumps or stunts as they could lead to serious injuries or death.
- To make sure your riding position allows you to remain in control and locate any upcoming craft or obstacle.
- Avoid Rough Water or Poor Visibility Operation. The watercraft is not intended for rough water usage. Usage on rough water may result in SEVERE INJURY OR DEATH.

### **Stopping/Docking**

The watercraft is slowed down by water drag. The stopping distance will vary depending on weight, speed, water surface condition, presence and direction of wind and current. The rider should become familiarized with the stopping distance under different conditions. Release the throttle at a sufficient distance before the expected docking area.

## **WARNING**

Directional control is reduced when the throttle is released and lost when engine is off.

### **Shutting Off the Engine**

To shut off the engine, completely release throttle lever and press the engine stop button. Remove safety lanyard from watercraft.

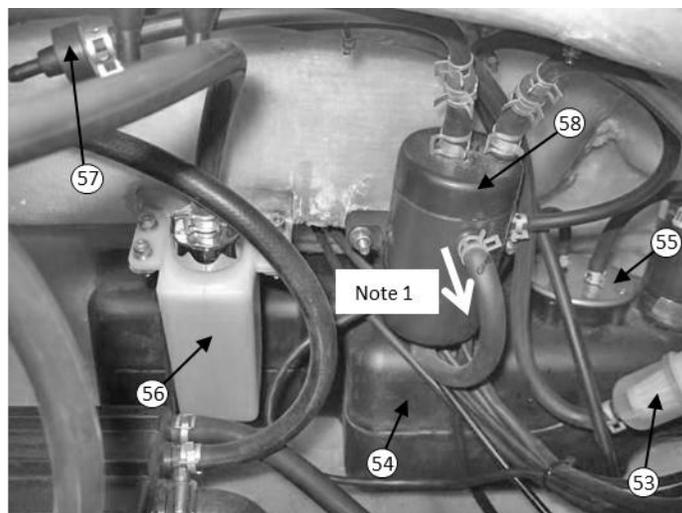
## **WARNING**

- Never leave the tether cord on its post when watercraft is not in operation in order to prevent accidental engine starting or to avoid unauthorized use by children or others or theft.
- Leave the tether cord on its post will drain battery dead when engine is not running.

## SPECIAL PROCEDURES

### Water in Carburetor

Once water gets into carburetor bowl, engine will not work properly. It may lose power and suddenly stop when you depress throttle lever, or you may not be able to start the engine. When it happens, drain carburetor and fuel water separator bottle. Use a flat screw driver to loose the carburetor drain screw 62 to drain the water or contaminated fuel in the carburetor bowl.



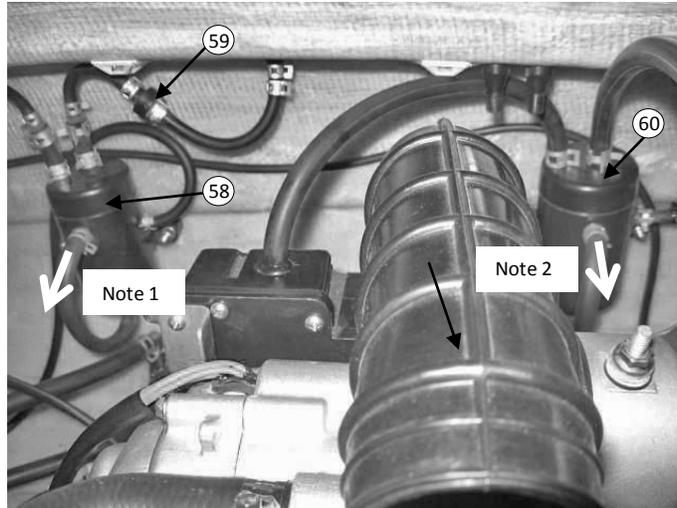
Note 1: Disconnect the hose as shown to drain water/oil. Reconnect the hose back after draining.

Drain contaminated fuel in the fuel water separator bottle (58) by pulling off the hose from the middle nipple of the bottle. Use a cup to collect the drained liquids. After cleaning, ensure to tight the carburetor drain screw and reconnect the hose to the middle nipple of the fuel water separator bottle.

### Water in Engine Breathing Oil Retainer

Over time, water and oil residue accumulate in the engine breathing oil retainer bottle (60). It retains oil mist and oil from engine breathing path. Check the bottle periodically and clean any oil residue to keep engine breathing freely. To drain the oil/water in the

retainer bottle, simply pull off the hose from the middle nozzle of the bottle, and let the water/oil drain out from the bottom nozzle through the hose to a cup. Reinstall the hose back after draining.



Note 2: Disconnect the hose as shown to drain water/fuel. Reconnect the hose back after draining.

## Fuel-Flooded Engine

When the engine does not start after several attempts, the engine may be fuel-flooded. Proceed as follows:

- 1) Open engine cover, leave it open for 30 minutes. If engine still does not start, remove the spark plug, let fuel inside cylinder ventilate for 30 minutes, clean spark plug or using a new spark plug, try to start engine.
- 2) If the engine continues to flood, see an authorized Aquanami dealer.

**CAUTION:** Never run engine for more than 30 seconds without supplying water to the exhaust cooling system and heat exchanger when watercraft is out of water.

## Jet Pump Water Intake and Impeller Cleaning

### **WARNING**

Keep away from intake grate while engine is running. Items such as long hair, loose clothing or personal flotation device straps can become entangled in moving parts.

Weeds, shells or debris can get caught on the intake grate, drive shaft and/or impeller.

A clogged water intake may cause troubles such as:

- Cavitation: Engine speed is high but watercraft moves slowly due to reduced jet thrust, jet pump components may be damaged.
- Overheating: Since the jet pump operation controls the flow of water to cool the exhaust system, a clogged intake will cause the exhaust to overheat and damage exhaust components.

A weed clogged area can be cleaned as follows:

### **WARNING**

If it is necessary to reach in to remove any foreign object caught in the propulsion system, the tether cord **MUSTBE REMOVED** from the engine cut-off switch

Manually remove the weeds, shells or debris from drive shaft and jet. Start engine and make sure watercraft operates properly. If system is still blocked, move the watercraft out of the water and remove blockage manually.

**CAUTION:** Inspect water intake grate and impeller for damage. Refer to an authorized Aquanami dealer for repair as necessary.

## Capsized Watercraft

The watercraft is designed so that it should not turn over easily. If watercraft turns over, it will remain capsized.

### **WARNING**

When watercraft is capsized, do not attempt to restart the engine. Operator and passengers should always wear approved personal flotation devices.

To return the watercraft upright, ensure the engine is off and the Lanyard is NOT on its post.

- In shallow water, lift one side of the watercraft to upright.
- In deep water, lean your body on one side and grab the other side of watercraft, then use your body weight to rotate the watercraft in any direction.
- The bilge pump should automatically start to drain water in bilge if water enters the bilge and the main switch is on. If the water sensor failed to start the bilge pump, push the bilge pump switch to drain the water in the bilge.

### **CAUTION:**

- If watercraft has been capsized for LESS THAN 3 minutes, wait until the bilge pump stop working. Then start the engine.
- If the watercraft has been capsized for MORE THAN 3 minutes, check bilge first. If bilge has less than 3 inches of water, wait until the bilge pump stop working or manually turn on the bilge pump if the water sensor failed to turn on the bilge pump. Then start the engine.

- If failed to drain the water from the bilge, do not attempt to crank engine to avoid water ingestion that would damage the engine. Bring the watercraft to the shore and drain the water in bilge as soon as possible.
- If the engine does not crank, do not attempt to start engine anymore. Otherwise engine could be damaged. See an authorized Aquanami dealer as soon as possible.

## **Submerged Watercraft**

To limit damages to the engine, drain bilge as soon as possible. If it was submerged in salt water, spray bilge and all components with fresh water using a garden hose to stop the salt corroding effect.

**CAUTION:** Never try to crank or start the engine. Water trapped in intake manifold would flow towards the engine and may cause severe damage to the engine. Bring the watercraft to be serviced by an authorized Aquanami dealer as soon as possible.

**CAUTION:** The longer the delay before you have the engine serviced, the greater the damage to the engine will be.

## **Water-Flooded Engine**

**CAUTION:** Never try to crank or start the engine. Water trapped in intake manifold would flow towards the engine and may cause severe damage to the engine. Bring the watercraft to be serviced by an authorized Aquanami dealer as soon as possible.

**CAUTION:** The longer the delay before you have the engine serviced, the greater the damage to the engine will be. Failure to have the engine properly serviced may cause severe engine damage.

***MAINTENANCE  
INFORMATION***

## MAINTENANCE SCHEDULE

Maintenance is very important for keeping the watercraft in a safe operating condition. The watercraft should be serviced as per the maintenance schedule. A repair shop or person of the owner's choosing may maintain, replace, or repair emission control devices and systems. These instructions do not require components or service by AQUANAMI or authorized AQUANAMI dealers. Although an authorized AQUANAMI dealer has in-depth technical knowledge and tools to service the AQUANAMI watercraft, the emission-related warranty is not conditioned on the use of an authorized AQUANAMI dealer or any other establishment with which AQUANAMI has a commercial relationship. For emission-related warranty claims, AQUANAMI is limiting the diagnosis and repair of emission-related parts to the authorized AQUANAMI dealers. For more information, please refer to the US EPA EMISSION-RELATED WARRANTY contained herein. **Proper maintenance is the owner's responsibility.** A warranty claim may be denied if, among other things, the claim was caused by neglect, improper maintenance or improper use.

You must follow the instructions for fuel requirements in the fueling section of this manual. Even if gasoline containing greater than ten volume percent ethanol is readily available, the US EPA has issued a prohibition against the use of gasoline containing greater than 10 vol% ethanol that applies to this product. The use of gasoline containing greater than 10 vol% ethanol with this engine may harm the emission control system and will void the warranty.

- **RECOMMEND PREMIUM UNLEADED GASOLINE 91 PUMP OCTANE OR HIGHER**
- **MINIMUM UNLEADED GASOLINE 86 PUMP OCTANE OR HIGHER**

**NOTE: Do not mix oil with fuel.**

**IMPORTANT:** For watercraft rental operations or commercial use will require greater frequency of inspection and maintenance.

Maintenance is critical for the safety and longevity of this product. If you are not familiar with safe service practices and adjustment procedures, see your authorized Aquanami dealer. In many instances proper tools and training are required for certain servicing or repair procedures. Never attempt repairs unless the appropriate tools are available. If required, contact your authorized Aquanami dealer for further servicing information. Adhere to the prescribed maintenance schedules to maintain the watercraft and equipment in top condition at all times. An inspection of the watercraft before each use is always a good recommendation that should be followed.

Carry out all maintenance as listed in the schedule whenever the hours or time of each column is reached.

 **WARNING**

Failure to properly maintain the watercraft according to the maintenance schedule and procedures can make it unsafe to operate.

The maintenance schedule does not exempt the pre-ride inspection.

### Watercraft Maintenance Chart

PART/TASK	First 10 hours	Every 50 hours or 6 months	Every 100 hours or 12 months	Note
<b>ENGINE</b>				
Engine oil and filter <sup>(1)</sup>		R <sup>(2)</sup>		(1) Check oil level daily before use. (2) Change oil and oil filter if the watercraft capsizes or water enters the engine. (3) Every 10 hours in salt water use. (4) Daily rinsing after salt water use. (5) Replace oil seal at 200 hours (irrespective of number of years). See NOTE 1 at the end of maintenance schedule table.
Corrosion protection (spray an anti-corrosion lubricant to metallic components in engine compartment)	L <sup>(3)</sup>	L <sup>(3)</sup>		
Engine rinsing		C <sup>(4)</sup>		
Engine drive shaft seal <sup>(5)</sup>			I, L, R	
Engine support and rubber mount	I		I	
Engine breath filter/oil retainer	C	C		
<b>AIR INTAKE SYSTEM</b>				
Air induction box	I		I	(1) Inspect and clean by repair shop.
Flame arrestor			I, C <sup>(1)</sup>	
<b>EXHAUST SYSTEM</b>				
Exhaust system and fasteners	I, C <sup>(1)</sup>	I, C	I <sup>(2)</sup>	(1) Daily flushing after salt water or dirty water use. (2) Inspect by repair shop.
<b>COOLING SYSTEM</b>				
Hose and fasteners	I		I	(1) Check daily before use. Coolant bottle should be kept full.
Heat exchangers	I	I		
Coolant <sup>(1)</sup>	I	I	R	
<b>FUEL SYSTEM</b>				
Carburetor		C <sup>(1), (2)</sup>		(1) By repair shop. (2) Also clean if watercraft capsizes.
Fuel cap, fuel lines, connections, pressure relief valves	I		I <sup>(1)</sup>	
Fuel filter		R		
Fuel water separator	C	C		
Throttle cable	I	I, L <sup>(1)</sup>		

<b>ELECTRICAL</b>				
Spark plug		I	R <sup>(1)</sup>	(1) By repair shop. (2) Inspect once per month. (3) Daily rinse and clean water sensor switch after salt water use.
Battery and fasteners	I	I <sup>(2)</sup>		
Electric connectors and fasteners	I		I	
Engine cut-off switch and stop switch	I	I		
Main switch	I	I		
Bilge pump automatic sensor switch	C, I <sup>(3)</sup>			
Bilge pump and manual switch	I			
<b>STEERING SYSTEM</b>				
Steering cable and connections	I		I, L <sup>(1)</sup>	(1) By repair shop.
Steering nozzle	I		I <sup>(1)</sup>	
<b>PROPULSION SYSTEM</b>				
Jet pump	C <sup>(1)</sup>			(1) Daily cleaning jet pump by spraying water in its inlet and outlet and then apply a coat of an anti-corrosion lubricant after salt water use. (2) Replace seals at 200 hours (irrespective of number of years). See NOTE 1 at the end of maintenance schedule table. (3) By repair shop.
Drive shaft rubber boot and mechanical seal <sup>(2)</sup>	I		I <sup>(3)</sup>	
Impeller shaft seal <sup>(2)</sup>			I <sup>(3)</sup>	
Stator cone cap "O" ring			I <sup>(3)</sup>	
Impeller and impeller wear ring clearance	I	I		
Sacrificial anode (if so equipped)			I, R	
Pump mounts	I	I		
Ride plate seal	I		I	
<b>Hull</b>				
Hull	I	I		(1) Daily rinsing after salt water use. (2) Every 10 hours in salt water use.
Engine compartment seals	I	I		
Engine compartment (spray water repellent to fiber glass hull in engine compartment)	C <sup>(1)</sup> , L <sup>(2)</sup>	C <sup>(1)</sup> , L <sup>(2)</sup>		
A: ADJUST C: CLEAN I: INSPECT L: LUBRICATE R: REPLACE				

Note 1: Inspect for possible leak or damage on oil seal or water seal, and drive shaft sleeve surface.

## MAINTENANCE PROCEDURES

This section includes instructions for basic maintenance procedures.

### **WARNING**

Turn off the engine and follow these maintenance procedures when performing maintenance. If you do not follow proper maintenance procedures you can be injured by hot parts, moving parts, electricity, chemicals or other hazards.

### General Inspection

Check engine compartment for any damage and for leaks of fuel, coolant or oil. Ensure all hose clamps are properly secured and no hose is cracked, kinked or presenting any other damage.

### **WARNING**

If any gasoline leak and/or odor are present, do not start the engine. Have the watercraft serviced by an authorized Aquanami dealer.

Inspect muffler, battery and fuel tank. Visually check electrical connections for corrosion and tightness. Inspect hull and jet pump water intake grate for damage. Replace or have damaged parts repaired.

### **WARNING**

Should removal of a locking device (e.g. lock tabs, self-locking fasteners, etc.) be required, always replace with a new one.

**NOTICE:** Never leave any object, rag, tool, etc., in the engine compartment or in the bilge.

## Cleaning

The bilge should be cleaned to remove any fuel/oil/electrolyte deposits and mildew. Occasionally, wash the body with water and soap (only use mild detergent). Remove any marine organisms from engine and/or hull. Apply non-abrasive wax such as silicone wax. Daily rinsing bile and engine after salt water use. Clean bilge water pump automatic switch sensor. Dry bilge and engine with clean dry towels. Clean jet pump by spraying water in its inlet and outlet.

**CAUTION:** Never clean fiberglass and plastic parts with strong detergent, degreasing agent, paint thinner, acetone, etc.

## Lubrication and Anticorrosion Protection

### Throttle Cable

Lubricate the throttle cable with XP-S Lube or equivalent. Depressing and releasing the throttle lever should operate smoothly. Throttle lever should return to its initial position without any hesitation. There must be a small amount of free-play when throttle lever is released. Refer to an authorized Aquanami dealer if necessary.

### **WARNING**

- Do not alter or tamper with throttle cable adjustment or routing.
- If throttle lever does not automatically return, do not operate watercraft and see your authorized Aquanami dealer.

### Electrical Connections

As necessary, apply an anti-corrosion product such as dielectric grease on battery posts and all exposed cable connectors. Additional Lubrication XP-S Lube or equivalent will help prevent corrosion of metallic parts and maintain proper operation of moving mechanisms.

## **Metallic Components in Engine Compartment**

Spray an anti-corrosion lubricant to metallic components in engine compartment for corrosion protection according to Maintenance Chart. For salt water use, spray an anti-corrosion lubricant to metallic components in engine compartment every 10 hours in salt water use.

## **Engine Compartment Fiber Glass Surface Protection**

Spray water repellent on fiber glass surface in engine compartment according to the Maintenance Chart to prevent mildew and marine organisms.

### **WARNING**

Certain components in the engine compartment may be very hot. Direct contact may result in skin burn. Do not touch any electrical parts or jet pump area when engine is running.

## **Engine**

### **Engine Oil**

Change oil and oil filter according to oil change schedule. See LIQUIDS section for detail. This watercraft is equipped with a 4-stroke engine that requires 4-stroke motor oil for internal engine lubrication.

Recommended Oil: Use a 4-STROKE SYNTHETIC OIL (summer). If the recommended engine oil is not available, use 5W40 or 10W40 grade motor oil.

**CAUTION:** Never use any 2-stroke engine oil.

### **WARNING**

- Oil is flammable. Always wipe off any oil spillage from the bilge.
- Certain components in the engine compartment may be very hot. Direct contact may result in skin burn.

## **Engine Oil Level**

**NOTICE:** Check oil level frequently and refill if necessary. Do not overfill as it can cause smoke and reduction in power. Operating the engine with an improper level may severely damage the engine and void the warranty.

**CAUTION:** Certain components in the engine compartment may be very hot. Direct contact may result in skin burn.

Oil level can be checked with watercraft either in or out of water. Before checking the oil level on this engine, the watercraft must be level. The engine should be warm. Start engine for 20 seconds to warm up oil if necessary. Reinstall dipstick and push in completely. Remove dipstick and read oil level. The oil level should be between the indicated marks on the dipstick.

Use a funnel to add oil. You may find it is helpful to attach 12MM (½ in) ID hose of 6 inches long to the funnel for filling oil. Add the recommended oil to the proper level. Do not overfill.

Every time oil is added in engine, do following steps to ensure correct oil level:

1. Start engine, idling for 20 seconds, then stop engine.
2. Wait for 2 minutes then recheck the oil level. This is required to allow the oil to flow evenly in the oil chambers and to prevent a false oil level.

The oil change may be performed by an authorized AQUANAMI dealer, repair shop, or person of your own choosing.

## **Oil Filter**

Replace oil filter according to Maintenance Chart. Use AQUANAMI supplied oil filter. The oil filter change may be performed by an authorized AQUANAMI dealer, repair shop, or person of your own choosing.

## **Engine Breathing Oil Retainer**

Located in engine compartment. Remove and retain oil mist and oil from engine crank case breathing path. Check the bottle periodically and clean any oil residue to keep engine breathing freely and to keep the engine compartment clean.

To drain the oil/water in the retainer bottle, simply pull off the hose from the middle nozzle of the bottle, and let the water/oil drain out from the bottom nozzle through the hose to a cup. See Engine Breathing Oil Filter and Retainer component in WATERCRAFT AND MAIN COMPONENTS section.

### **Engine Drive Shaft Seal**

Inspect and replace engine drive shaft seal according to Maintenance Chart. Replacing seal may be performed by an authorized AQUANAMI dealer or repair shop.

## **Exhaust System**

### **Flushing Exhaust and Heat Exchanger**

Flushing the exhaust system with fresh water after each use is essential to neutralize corroding effects of salt or other chemical products present in water. It will also help to remove sand, salt, shells or other particles in water jackets and/or hoses. Flushing should be performed when the watercraft is not expected to be used further the same day or when the watercraft is stored for any extended period of time.

**CAUTION:** Properly follow the instructions given in the flushing procedure.

Proceed as follows:

1. Clean ride plate with a water hose.
2. Clean jet pump by spraying water in its inlet and outlet.
3. Connect a garden hose to heat exchanger and exhaust flushing connector located at the rear of watercraft, do not open the water tap and do not start engine yet.
4. To flush heat exchanger and exhaust cooling system, start the engine then immediately open water tap.
5. Run the engine about 30 seconds at a fast idle between 3000 - 4000 RPM.
6. Disconnect the garden hose first, and keep engine running another 10 seconds.
7. Stop the engine.

## **CAUTION:**

- Never flush a hot engine.
- Always start the engine before opening the water tap.
- Open water tap immediately after engine is started to prevent overheating.
- Never run engine without supplying water to the exhaust cooling system when watercraft is out of water.
- Never run engine longer than 1 minute. Drive line seal has no cooling when watercraft is out of water.
- Always close the water tap before stopping the engine.

**Running water into the flush system without the engine first running may result in engine damage and will void the warranty.**

## **Cooling System**

### **Flushing Heat Exchanger**

Flushing heat exchanger with fresh water is essential to neutralize corroding effects of salt or other chemical products present in water. It will help to remove sand, salt, shells or other particles in water jackets and/or hoses. Flushing should be performed when the watercraft is not expected to be used further the same day or when the watercraft is stored for any extended time. See Flushing Exhaust System above for the flushing procedure.

### **Coolant**

Check coolant level in coolant bottle daily before use. The coolant in the bottle should be full. Antifreeze coolant should be replaced every 100 hours or every 12 months to prevent antifreeze deterioration.

## Fuel System

### **WARNING**

- Gasoline is highly flammable and explosive. Failure to check and repair for any fuel leakage could result in fire or explosion, which can cause severe injury or death.
- Shut off engine and remove the Lanyard from its post.
- Do not smoke. And keep away any fire or sparks.
- Fuel line is pressurized. Fuel can spray out and cause accident.
- Do not attempt to run engine with fuel line disconnected.

### **Carburetor Cleaning**

Water or contaminated fuel in carburetor bowl may cause engine to suddenly stop, not start or run erratically. Drain carburetor to remove any possible water in the carburetor bowl. Open the carburetor drain screw at the bottom of the carburetor. Use a bottle to collect the soiled/watered gas in the carburetor bowl. Close the drain screw after cleaning.

The carburetor should be cleaned using carburetor cleaner according to Maintenance Chart or after watercraft capsizes. Carburetor cleaning should be performed by an authorized Aquanami dealer.

## Electric System

### **Engine Start/Stop Button and Safety Lanyard**

Make sure that both switches operate properly. Start engine and stop it using each switch individually. Lanyard should be securely attached to the kill switch post. Inspect Engine Start/Stop Button and Safety Lanyard according to Maintenance Chart.

## **WARNING**

- Should the stop/start button not work properly, refer to an authorized Aquanami dealer immediately. Failure to do so may result in SEVERE INJURY OR DEATH.
- Should the safety lanyard become loose or not work properly, replace it immediately in order to avoid unsafe use.

### **Bilge Pump Automatic Sensor Switch**

Make sure the bilge pump automatic sensor switch operates properly. Test the automatic sensor switch by adding clean water to bilge. Bilge pump should start to run when water level reaches about 2 inches.

### **Bilge Pump and Manual Switch**

Make sure the bilge pump and manual switch operate properly. Turn on the bilge pump manual switch, bilge pump should start to run immediately.

### **Battery**

Pay attention to battery “+ and “-” signs. Ensure the battery is correctly connected, tighten and secured.

## **WARNING**

The battery must always be fully charged and in good condition. Loss of battery power may leave you stranded. Never operate the watercraft if the battery does not have sufficient power or if it shows any other signs of decreased power.

### **Battery Cleaning**

Clean the battery casing, cables and battery posts using a solution of baking soda and water. Remove corrosion from battery cable terminals and battery posts using a firm wire brush. Battery top should be cleaned with a soft brush and any grease-cutting soap or baking soda solution. Rinse with clear water then drywell.

## **Battery Inspection**

Visually inspect battery casing for cracks, leaks or other possible damages.

Discoloration, warping or raised top, indicates that the battery has overheated or been overcharged.

If the casing is damaged, replace battery and thoroughly clean battery tray and surrounding area with a water and baking soda solution.

**CAUTION:** Should the battery casing be damaged, wear a suitable pair of non-absorbent gloves when removing the battery by hand.

Inspect the battery posts for security of mounting.

## **Battery Storage**

**NOTICE:** Battery storage is critical for battery life. Regularly charging the battery during storage will prevent cell sulfation. Keeping the battery in vehicle for storage may lead to contacts degradation/corrosion and case damage if freezing occurs.

A discharged battery will freeze and crack in areas where freezing conditions are experienced. Electrolyte leakage will damage surrounding parts. Always remove battery from vehicle for storage and regularly recharge it to keep an optimal condition. Clean battery terminals and cable connections using a wire brush. Apply a light coat of dielectric grease on terminals.

Clean battery casing using a solution of baking soda and water. Rinse battery with clear water and dry well using a clean cloth.

Store battery in a cool dry place. Such conditions reduce self-discharging and keep fluid evaporation to a minimum. Keep battery away from dew, high moisture and direct sunlight.

Recharge frequency depends on battery condition and storage temperature. Maintain battery as per following table.

**NOTE:** The battery must always be stored in fully a charged state.

AMBIENT TEMPERATURE	CHARGING FREQUENCY
Below 16°C (60°F)	Every month
Above 16°C (60°F)	Every 2 weeks

### **Charging a Battery**

#### **⚠ WARNING**

Never charge or boost the battery while installed in the watercraft.

#### **⚠ WARNING**

Always wear safety glasses and charge the battery in a ventilated area. Never charge or boost a battery while installed on a vehicle. Do not open the sealed caps during charging. Do not place battery near an open flame.

**NOTICE:** If the battery becomes hot to the touch, stop charging and allow it to cool before continuing.

**NOTE:** Sealed VRLA batteries have an internal safety valve. If battery pressure increases due to overcharging, the valve opens to release excess pressure, preventing battery damage. Carry out a battery UNLOADED VOLTMETER TEST as described in this subsection, then proceed as described here.

An automatic charger is the fastest and most convenient way for error-proof charging. When using a constant current charger, charge battery according to the chart below.

Battery Voltage Below 12.8 V and Above 11.5 V:

	TIME	CHARGE
STANDARD CHARGING (RECOMMENDED)	4-9 hours	2A
QUICK CHARGING	50 minutes	10A

### Battery Voltage Below 11.5 V:

A battery with a voltage below 11.5 V requires a special procedure to recharge. In charging an over discharged battery, its internal resistance may be too high to charge at a normal charging rate.

Set charger to the 10 A charging rate and monitor charging current for approximately 30 minutes. If there is no change in charging current or battery becomes abnormally hot, the battery is most likely at the end of its service life and should be replaced.

### **Battery Maintenance**

These batteries require little maintenance to perform perfectly. Follow this simple check list for optimum battery performance:

- Check voltage every 3 months using a voltmeter.
- Keep a battery fully charged to 100% (12.8 V or higher after standing 2 hours).
- Check and charge battery if the voltage drops below 12.5 V.
- Keep the battery top free of grime.
- Clean terminals and connectors if necessary.
- For storage, pull battery or disconnect battery cables.

### **Spark Plug**

Spark plug could be degraded over time. Inspect spark plug according to maintenance chart. Replace bad spark plug.

### ***Spark Plug Removal***

- Disconnect the ignition coil input connector from spark plug.
- Remove spark plug by using a spark plug socket.

## **WARNING**

Never remove an ignition coil from a spark plug without disconnecting it from the wiring harness. Flammable vapors may be present in the bilge. Should the tether cord be installed on the engine cut-off switch, a spark could be generated at the coil spark plug end which could cause an explosion.

- Clean the spark plug and cylinder head with pressurized air.
- Unscrew spark plug then use the ignition coil to take spark plug out of spark plug hole.

### ***Spark Plug Installation***

Prior to installation, ensure the contact surfaces of the cylinder head and spark plug are free of grime.

## **WARNING**

Do not adjust gap on this type of spark plug. The adjustment could weaken negative electrodes which may lead to electrode breaking and severe engine damage.

1. Using a wire feeler gauge, check electrode gap.
2. Apply LOCTITE 767 (ANTISEIZE LUBRICANT) over the spark plug threads to prevent possible seizure.
3. Hand screw spark plug into cylinder head. Then, tighten the spark plug clockwise with an approved spark plug socket.
4. Install ignition coil. Refer to Ignition Coil Installation.

### **Ignition Coil**

Replacing an ignition coil shall be performed by an authorized AQUANAMI dealer.

### **Electric Fuse/Circuit Breaker**

If the electric bilge pump does not start, check the electric fuse/circuit breaker located inside electric control box. If a fuse is blown, replace by one of the same rating.

Replace electric fuse or reset circuit breaker button only after the root cause of the problem has been found and corrected.

## **WARNING**

- Do not use a higher rated fuse as this can cause severe damage.
- If a fuse has burnt out, the source of the malfunction should be determined and corrected before restarting. See an authorized AQUANAMI dealer for servicing.

### **Steering System**

Check steering mechanism to ensure steering operates smoothly. There should be no excessive lash in the system. Refer to an authorized Aquanami dealer if necessary. Check and lubricate steering cable and rotating mechanism by an authorized AQUANAMI dealer according to the Maintenance Chart.

### **Propulsion System**

Remove the Lanyard from its post to prevent accidental engine starting before inspecting and cleaning the jet pump area. Clean the jet pump by spraying water in its inlet and outlet and then apply a coat of an anti-corrosion lubricant for corrosion protection after salt water use. Inspect impeller, intake grate, ride plate, for any damage and replace any damaged part before operating the unit. Inspect all fasteners. Clean and lubricate for corrosion prevention. Inspect propulsion system according to the Maintenance Chart.

Automatic vacuum siphon pump uses a low pressure area in the jet pump to siphon the water out of the bilge when the engine is operating. Inspect the pump head for obstruction and clean as necessary.

Inspect and replace sacrificial anode if equipped.

### **Hull**

Daily clean hull and bilge after salt water use. Rinse watercraft bilge area with fresh water. Never use a high pressure washer to clean the bilge. USE LOW PRESSURE ONLY (such as a garden hose). High pressure can cause damages to electrical or

mechanical systems. Inspect hull for cracks and any possible leaks. Check all seals in good conditions. Lift front end of watercraft to completely drain bilge through the bilge drain plug.

***Anticorrosion Treatment***

Wipe off any residual water in the engine compartment. Spray an anti-corrosion lubricant to metallic components in engine compartment while minimizing Overspray for corrosion protection.

**NOTE:** Engine compartment cover should be left partially open during storage. This will prevent engine compartment condensation and possible corrosion.

# WATERCRAFT CARE

## Post – Operation Care

### **WARNING**

Allow engine to cool before performing any maintenance.

### General Care

Take the watercraft out of the water every day to prevent marine organism growth. Should any water be present in the bilge, open the drain plugs and tilt the watercraft rearward in order to allow water to flow out. **Remember to always close the drain plugs before placing the unit in water.** Wipe off any remaining fluid in the engine compartment (engine, battery, etc.) with clean dry rags (this is particularly important in salt water operation).

Take additional care and cleaning if the unit has been used in foul or salt water. Cleaning should occur immediately after salt or foul water use. Rinse off watercraft's bilge area with fresh water. Rinse and clean bilge water pump automatic sensor switch.

**CAUTION:** Failure to perform proper care such as: watercraft rinsing, exhaust cooling system flushing or anticorrosion treatment, when watercraft is used in salt or foul water may result in damage to the watercraft and its components.

### **NOTICES:**

- Never leave the watercraft stowed in direct sunlight.
- Engine compartment cover should be left partially open when not in use. This will prevent engine compartment condensation and possible corrosion.

## **Heat Exchanger and Exhaust Cooling System Flushing**

Flushing the heat exchanger and exhaust cooling system with fresh water is essential to neutralize corroding effects of salt or other chemical products present in water.

Flushing should be performed when the watercraft is not expected to be used further the same day or when the watercraft is stowed for any extended time.

Proceed as follows:

1. Clean ride plate up and bottom, and heat exchange with a water hose.
2. Clean jet pump by spraying water in its inlet and outlet.
3. Connect a garden hose to heat exchanger/exhaust flushing connector, do not open the water tap and do not start engine yet.
4. To flush the exhaust cooling system, start the engine then immediately open water tap.
5. Run the engine about 30 seconds at a fast idle between 3000 - 4000 RPM.
6. Disconnect the garden hose first, and keep engine running another 10 seconds.
7. Stop the engine.

### **CAUTIONS:**

1. Never flush a hot engine.
2. Always start the engine before opening the water tap.
3. Open water tap immediately after engine is started to prevent overheating.
4. Never run engine without supplying water to the exhaust cooling system when watercraft is out of water.
5. Never run engine longer than 1 minute. Drive line seal has no cooling when watercraft is out of water.
6. Close the water tap, then stop the engine.
7. Always close the water tap before stopping the engine.

8. The user should not start water flow into flush water connector until the engine is started; adding that running water into the flush system without the engine first running will result in engine damage that will not be covered under warranty.

### **Anticorrosion Treatment**

To prevent corrosion, spray a corrosion inhibitor (salt water resistant) over metallic components in engine compartment. Apply dielectric grease (salt water resistant) on battery posts and cable connectors. Spray water repellent on fiber glass surface in bilge to prevent mildew and marine organisms according to the Maintenance Chart.

## STORAGE

### **WARNING**

Because fuel and oil are flammable, you should have an authorized AQUANAMI dealer, repair shop, or person of your own choosing to inspect the fuel system integrity as specified in the periodic inspection chart.

It is recommended that the watercraft be serviced by an authorized AQUANAMI dealer, repair shop, or person of your own choosing, however the following operations can be performed by you with a minimum of tools.

**NOTE:** Carry out the following tasks in the same order as detailed in this section.

**NOTICE:** Do not run the engine during the storage period.

## Propulsion System

### Jet Pump Cleaning

Clean jet pump by spraying water in its inlet and outlet and then apply a coat of an anti-corrosion lubricant for corrosion protection.

### **WARNING**

Always remove tether cord from the engine cut-off switch to prevent unexpected engine starting before cleaning the propulsion system components. Engine must not be running for this operation.

### Jet Pump Inspection

Remove jet pump nozzle, open the cone cover of stator shaft, and check if water is present; if so, see your authorized AQUANAMI dealer.

## **Fuel System**

### **Fuel System Protection**

**FUEL STABILIZER should be added in the fuel tank every fill up to prevent fuel deterioration, water accumulation from ethanol and fuel system gumming.** Follow stabilizer manufacturers' instructions for proper use.

**NOTICE:** It is highly recommended to add fuel stabilizer at storage in order to maintain fuel system in good condition. Fuel stabilizer should be added prior to engine lubrication and fuel tank top up to ensure fuel system components protection against ethanol and varnish deposits.

Fill up fuel tank completely. Make sure there is no water inside fuel tank.

**NOTICE:** Water in the fuel tank or system may cause severe internal damage to the engine and carburetor.

## **Engine and Exhaust System**

### **Heat Exchanger and Exhaust System Flushing**

Perform procedure as described in MAINTENANCE PROCEDURES.

### **Engine Oil and Filter Replacement**

The oil change and filter replacement may be performed by an authorized AQUANAMI dealer, repair shop, or person of your own choosing.

### **Engine Internal Lubrication**

1. Disconnect ignition coils from spark plug, then remove spark plug from engine cylinder head, and refer to MAINTENANCE PROCEDURES.
2. Spray anti-corrosion lube in spark plug holes.
3. Press the engine START button to crank the engine a few turns. This will distribute the oil on the cylinder walls.

4. Apply a small amount of anti-seize lubricant on spark plug threads, then reinstall the spark plug in the engine cylinder head. Refer to MAINTENANCE PROCEDURES.
5. Install the ignition coils, and refer to MAINTENANCE PROCEDURES.

### **Engine Coolant**

Antifreeze should be replaced every 100 hours or every year to prevent antifreeze deterioration.

## **Electric System**

### **Battery Removal and Charging**

Refer to BATTERY in MAINTENANCE PROCEDURES section.

## **Body and Hull**

### **Body and Hull Cleaning**

Wash the body with a soap and water solution (use only mild detergent). Rinse thoroughly with fresh water. Remove marine organisms from the hull.

**NOTICE:** Never clean plastic parts with strong detergent, de-greasing agent, paint thinner, acetone, or other strong chemical or petroleum cleaners.

### **Engine Compartment Cleaning**

Clean bilge and bilge pump automatic sensor switch using hot water and a mild detergent or with bilge cleaner. Rinse thoroughly. Lift front end of watercraft to completely drain bilge through the bilge drain plug.

**NOTE:** Engine compartment cover should be left partially open during storage. This will prevent engine compartment condensation and possible corrosion.

### **Bilge Anticorrosion Treatment**

Wipe off any residual water in the engine compartment. Spray an anti-corrosion lubricant to metallic components in engine compartment while minimizing Overspray for corrosion protection.

### **Body and Hull Protection**

If the watercraft is to be stored outside, cover it with an opaque tarpaulin to prevent sun rays and grime from oxidation of the fiberglass, gelcoat and degradation of the plastic components.

**NOTICE:** The watercraft should never be left in water for storage. Never leave the watercraft stored in direct sunlight. Never store watercraft in a plastic bag.

### **Repairs**

If any repairs are needed to body or to the hull, contact your authorized AQUANAMI dealer.

## **PRE-SEASON PREPARATION**

### **Pre-Season Preparation Chart**

Maintenance preparation must be performed in conjunction with PERIODIC MAINTENANCE CHART. Ensure to perform all tasks included in the 100 HOURS OR 1 YEAR column before storage.

**NOTE:** It is recommended that an authorized AQUANAMI dealer perform preseason maintenance preparation at the same time that any safety-related factory campaigns are performed by the authorized AQUANAMI dealer.

Use the following chart for preseason preparation. Since technical skills and special tools are required, some operations should be performed by an authorized AQUANAMI dealer.

### Preseason Preparation Chart

GENERAL	Inspection of hull and seals. Lubrication/corrosion protection.	Operator
ENGINE	Exhaust system condition and fasteners.	Dealer
	Condition of seals and fasteners.	Dealer
	Oil level and oil filter.	Dealer
COOLING SYSTEM	Inspection of heat exchangers, coolant level, hoses and components. If antifreeze was not changed for storage, drain and replace with new antifreeze.	Dealer
FUEL SYSTEM	Inspection of carburetor. Check throttle valve for smoothness. And check fuel bowl if necessary for possible corrosion or fuel path blocking. Check/lubricate throttle cable.	Dealer
	Fuel system; fuel filter, check valves, lines and fasteners.	Dealer
	Filler neck, fuel tank and fuel cap condition.	Dealer
	Fuel tank straps.	Operator
	Refill fuel tank.	Operator
ELECTRICAL SYSTEM	Battery condition/charging and reinstallation.	Dealer
	Start, stop, cut-off switch and main switch.	Dealer
	Instrument meters.	Dealer
	Bilge pump automatic sensor	Operator
	Bilge pump and manual sensor	Operator
STEERING SYSTEM	Steering system lubrication/adjustment/inspection.	Dealer
PROPULSION	Propulsion system inspection.	Dealer
	Inspection of vacuum siphon pump.	Dealer

# ***TECHNICAL INFORMATION***

# WATERCRAFT IDENTIFICATION

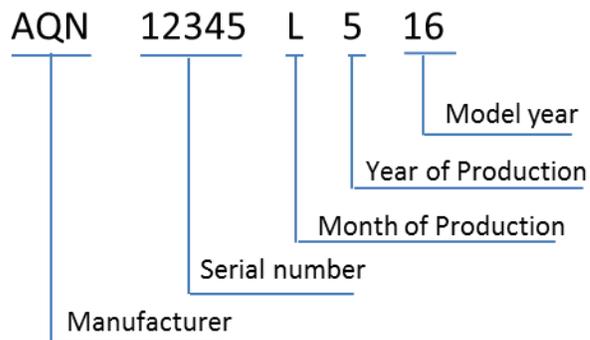
The main components of the watercraft (engine and hull) are identified by different serial numbers. It may sometimes become necessary to locate these numbers for warranty purposes or to trace the watercraft in the event of theft.

## Hull Identification Number

The Hull Identification Number (HIN) is engraved on the right hand side of the hull at the rear of watercraft.



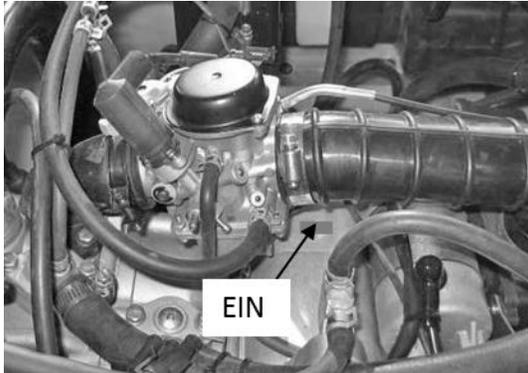
It is composed of 12 digits:



## Engine Identification Number

The Engine Identification Number

(EIN) is located on the cylinder head under the air induct manifold.



# **ENGINE EMISSIONS INFORMATION**

## **Manufacturer's Responsibility**

Beginning with 1999 model year engines, PWC manufacturers of marine engines must determine the exhaust emission levels and certify these engines with the United States of America Environmental Protection Agency (EPA). An emissions control information label, showing emission levels and engine specifications, must be placed on each watercraft at the time of manufacture.

## **Dealer's Responsibility**

When performing service on Aquanami watercraft that carries an emissions control information label, replacement or repair of any emission related component must be executed in a manner that maintains emission levels within the prescribed certification standards.

Dealers are not to modify the engine in any manner that would alter the horsepower or allow emission levels to exceed their predetermined factory specifications. Exceptions include manufacturer's prescribed changes.

## **Owner Responsibility**

The owner/operator is required to have engine maintenance performed to maintain emission levels within prescribed certification standards.

The owner/operator is not to, and should not allow anyone to modify the engine in any manner that would alter the horsepower or allow emissions levels to exceed their predetermined factory specifications.

## **EPA Emission Regulations**

All Aquanami watercrafts are certified to the EPA as conforming to the requirements of the regulations for the control of air pollution from new watercraft engines.

The factory procedure for servicing the product must be strictly followed and, whenever practicable, returned to the original intent of the design.

The responsibilities listed above are general and in no way a complete listing of the rules and regulations pertaining to the EPA requirements on exhaust emissions for marine products. For more detailed information on this subject, you may contact:

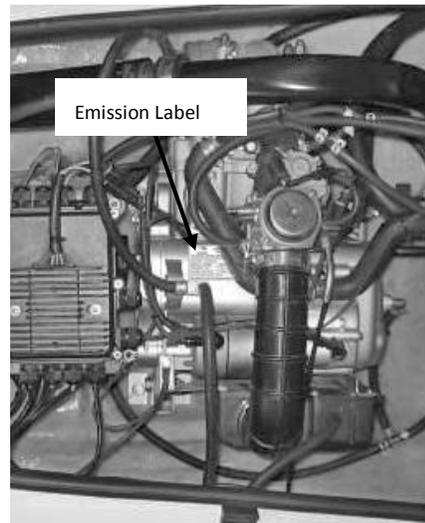
U.S. Environmental Protection Agency  
Office of Transportation and Air Quality  
1200 Pennsylvania Ave. NW  
Mail Code 6403J  
Washington D.C. 20460

EPA INTERNETWEB SITE:  
<http://www.epa.gov/otaq>

## Emission Control Information

This marine SI engine complies with U.S. EPA Exhaust Regulations for 2015. The emission label is attached on the top of the engine crank case.

 <b>AQUANAMI</b>		<b>EMISSION CONTROL INFORMATION</b>	
THIS MARINE SI ENGINE COMPLIES WITH U.S. EPA EXHAUST REGULATIONS FOR 2015.			
ENGINE FAMILY: FAQNM.2952GA			
SPARK PLUG: NGK DR8EA	SPARK PLUG GAP: 0.6 - 0.7 mm		
DISPLACEMENT: 0.295 L	FUEL: Unleaded Gasoline		
IDLE SPEED: 1600 ± 200 rpm	POWER: 11.0 kW		
EXHAUST EMISSION CONTROL: EM, ECM			
SEE OPERATOR'S GUIDE FOR MAINTENANCE SPECIFICATIONS.			



# SPECIFICATION

## 2016 MODEL JETANGLER SPECIFICATION

<b>CAPACITY</b>		
Max Number of People (with passenger seat):		2
Recommended Max Load:	160 kg	350 lbs
<b>DIMENSIONS, WEIGHT AND RECOMMENDED MAXIMUM LOADS</b>		
Length	360 cm	141.7 in
Width	96 cm	37.8 in
Height	41 cm	16.1 in
Dry Weight	113 kg	249 lbs
<b>PERFORMANCE</b>		
Max Speed <sup>[2]</sup>	45 km/h	27 mph
Fuel Assumption at Full Throttle	5 L/h	1.32 gal/h
Play Time at Full Throttle	2.5 hours	
<b>ENGINE</b>		
Type	4 strokes	
Declared Power <sup>[1]</sup>	11kW	15 hp
Number of Cylinders	1	
Displacement	295 cc	18 in <sup>3</sup>
Bore	75 mm	2.95 in
Stroke	66.8 mm	2.63 in
Compression Ratio	10:1	
Start	Electric start	
Ignition	Type	CDI
Spark plug	NGK DR8EA	
Spark plug gap	0.6 - 0.7 mm	0.0236 - 0.0276 in
Valve clearance (Cold)		
Intake	0.09 mm	0.0035 in
Exhaust	0.12 mm	0.0047 in
<b>FUEL SYSTEM</b>		
Fuel Tank Capacity	14 liters	3.7 gal
<b>COOLING SYSTEM</b>		

Engine Cooling	Closed loop water cool	
Oil Cooling	Heat exchanger cooled by water flow from jet pump	
Exhaust Cooling	Inject water cool by water flow from jet pump	
Engine Coolant Quantity	1.72 liters	1.82 qt
<b>LUBRICATION SYSTEM</b>		
Lubrication	Type	Oil sump
Engine Oil Quantity	2.2 liters	2.32 qt
<b>PROPULSION SYSTEM</b>		
Jet pump	Type	Axial flow, single stage
Transmission	Type	Direct drive

[1]. Declared power as per ISO 8665 at propeller-shaft.

[2]. Maximum speed varies depending on weight, wind and current conditions.

**Note:** Aquanami reserves the right to make changes in design and specifications and/or to make additions to, or improvements in its products without imposing any obligation upon itself to install them on its products previously manufactured.

# ***TROUBLESHOOTING***

# TROUBLESHOOTING GUIDELINES

Use this section to check for the possible cause of simple troubles you may have with your watercraft. You may solve some of the problems rather quickly, but may need help from a skilled mechanical technician. In such cases, refer to an authorized Aquanami Dealer for servicing. If a procedure for replacement or repair is not described in the Guide, have an Authorized Aquanami Dealer perform necessary service.

## Trouble Shooting Guidelines

TROUBLE	POSSIBLE CAUSE	REMEDY
<b>Engine does not turn over</b>	main switch is off	turn on main switch
	Lanyard is not in place	put Lanyard on post
	burn fuse	check and replace
	battery runs down, bad terminal connection	charge battery and tighten terminal
	fault start motor	refer to a Aquanami dealer
	bad electric connectors of start motor cables	refer to a Aquanami dealer
	seized jet pump	refer to a Aquanami dealer
	water flooded and seized engine	refer to a Aquanami dealer
	faulty stop button, faulty Lanyard post	refer to a Aquanami dealer
	bad start switch	refer to a Aquanami dealer
	bad relay switch	refer to a Aquanami dealer
Engine turns slowly, but does not start	weaken or discharged battery	replace battery
	bad battery cable connection	tighten
	worn start motor	refer to a Aquanami dealer
Engine turns normally, but does not start	empty fuel	fill
	stale or contaminated fuel tank	clean and refill
	watered/contaminated carburetor	drain carburetor, and drain fuel retainer
	fouled or defective spark plug	replace

	spark plug cap not connected or loose	tighten
	fuel flooded engine	refer to a Aquanami dealer
	water flooded engine	refer to a Aquanami dealer
	disconnected or faulty fuel pump	refer to a Aquanami dealer
	defective electronic control box	refer to a Aquanami dealer
	bad electric connectors	Clean and dry the connectors
Engine runs irregularly or stalls	empty, stale or contaminated fuel	siphon tank and refill
	watered carburetor and watered fuel retainer	drain carburetor bowl and drain fuel retainer
	fouled or defective spark plug	replace
	electric wire loose connection or bad connectors	tighten, or see a Aquanami dealer.
	defective electric control box	refer to a Aquanami dealer
Weak spark plug	fouled or weak spark plug	replace
	faulty ignition coils (inside electronic control box)	refer to a Aquanami dealer
Engine smoke	oil too high	drain excessive oil
	internal engine damage	refer to a Aquanami dealer
	coolant too low; coolant leak; damaged cooling system	fill coolant according to Liquid section
Engine overheat	coolant low; clogged exhaust cooling system; coolant leak; damaged cooling system; clogged jet	fill coolant; flushing exhaust cooling system; clean jet; or refer to a Aquanami dealer
Watercraft can not reach top speed, engine does not have power	weeds and debris trapped inside jet	remove and clean
	water or contaminated fuel in carburetor bowl and fuel retainer	drain and clear
	watered or contaminated fuel	clean and refill
	damaged impeller	refer to a Aquanami dealer
	air leak between ride plate and intake pipe, damaged water intake seal	refer to a Aquanami dealer
	weak spark plug	replace
	damaged engine by water injection	refer to a Aquanami dealer
	engine oil level too high	drain oil and check
	blocked engine breathing hose; blocked shut off valve	clean and remove blockage
	foul throttle lever	refer to a Aquanami dealer

	person and cargo weight is too heavy	follow loading capacity
Abnormal vibration	misalignment at the coupler between engine output shaft and jet drive shaft	refer to a Aquanami dealer
Water in bilge	engine compartment cover not properly closed	install cover properly
	bad seal	replace
	automatic siphon pump head is blocked	clean
	fouled bilge pump	replace bilge pump
	bad drive shaft mechanic seal	refer to a Aquanami dealer
	hull leak	refer to a Aquanami dealer
	loose drain plug	tighten
	bad air intake valve	check and replace

# ***WARRANTY***

# **AQUANAMI LIMITED WARRANTY – USA 2016 JETANGLER**

## **1. Scope**

AQUANAMI warrants its watercraft sold by authorized AQUANAMI Dealers (as defined below) in the United States of America (“USA”) from defects in material or workmanship for the period and under the conditions described below. This limited warranty will become null and void if: (1) the AQUANAMI watercraft was used for racing or any other competitive activity, at any point, even by a previous owner; or (2) the AQUANAMI watercraft has been altered or modified in such a way so as to adversely affect its operation, performance or durability, or has been altered or modified to change its intended use.

Except if otherwise specified, all genuine AQUANAMI parts and accessories installed by an authorized AQUANAMI dealer (as hereinafter defined) at the time of delivery of the 2015 AQUANAMI watercraft, carry the same warranty as that of the AQUANAMI watercraft.

## **2. LIMITATIONS OF LIABILITY**

THIS WARRANTY IS EXPRESSLY GIVEN AND ACCEPTED IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT THAT THEY CANNOT BE DISCLAIMED, THE IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE LIFE OF THE EXPRESS WARRANTY. INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE EXCLUDED FROM COVERAGE UNDER THIS WARRANTY. SOME STATES/PROVINCES DO NOT ALLOW FOR THE DISCLAIMERS, LIMITATIONS AND EXCLUSIONS IDENTIFIED ABOVE, AS A RESULT, THEY MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS, AND YOU MAY ALSO HAVE OTHER LEGAL RIGHTS WHICH MAY VARY FROM STATE TO STATE, OR PROVINCE TO PROVINCE.

Neither the distributor, any AQUANAMI dealer nor any other person has been authorized to make any affirmation, representation or warranty regarding the product, other than those contained in this limited warranty, and if made, shall not be enforceable against AQUANAMI. AQUANAMI reserves the right to modify this warranty at any time, being understood that such modification will not alter the warranty conditions applicable to the products sold while this warranty is in effect.

## **3. EXCLUSIONS—ARE NOT WARRANTED**

The following are not warranted under any circumstances:

- Normal wear and tear;
- Routine maintenance items, tune ups, adjustments;

- Damage caused by failure to provide proper maintenance and/or storage, as described in the Operator's Guide;
- Damage resulting from removal of parts, improper repairs, service, maintenance, modifications or use of parts not manufactured or approved by AQUANAMI or resulting from repairs done by a person that is not an authorized servicing AQUANAMI dealer;
- Damage caused by abuse, abnormal use, neglect, or operation of the product in a manner inconsistent with the recommended operation described in the Operator's Guide;
- Damage resulting from accident, submersion, fire, theft, vandalism or any act of God;
- Operation with fuels, oils or lubricants which are not suitable for use with the product (see the Operator's Guide);
- Damage from rust, corrosion or exposure to the elements;
- Damage from cooling system or jet pump blockage by foreign material;
- Water damages caused by water ingestion;
- Damages related to gel coat finish including but not limited to cosmetic gel coat finish, blisters or fiberglass delamination caused by blisters, crazing, spider or hairline cracks; and
- Incidental or consequential damages, or damages of any kind including without limitation towing, storage, telephone, rental, taxi, inconvenience, insurance coverage, loan payments, loss of time, loss of income.

#### **4. WARRANTY COVERAGE PERIOD**

This limited warranty will be in effect from (1) the date of delivery to the first retail consumer or (2) the date the product is first put into use, whichever occurs first and for the applicable period below:

1. Six (6) CONSECUTIVE MONTHS for private use owners.
2. Three (3) CONSECUTIVE MONTHS for commercial use owners. A personal watercraft is used commercially when it is used in connection with generating income or any work or employment during any part of the warranty period. A personal watercraft is also used commercially when, at any point during the warranty period, it has commercial tags or is licensed for commercial use. This is a minimal warranty period which can be extended by any applicable warranty promotional program, as the case may be.

3. For emission-related components; please also refer to the US EPA EMISSION RELATED WARRANTY contained herein.

The repair or replacement of parts or the performance of service under any applicable warranty does not extend the life of such warranty beyond its original expiration date.

## **5. CONDITIONS REQUIRED FOR WARRANTY COVERAGE**

This limited warranty coverage is available only if each of the following conditions has been fulfilled:

- The 2015 AQUANAMI watercraft must be purchased as new and unused by its first owner from an AQUANAMI dealer authorized to distribute AQUANAMI watercraft in the country in which the sale occurred;
- The AQUANAMI specified pre-delivery inspection process must be completed and documented and signed by the purchaser;
- The 2015 AQUANAMI watercraft must have undergone proper registration by an authorized AQUANAMI dealer;
- The 2015 AQUANAMI watercraft must be purchased in the country in which the purchaser resides; and
- Routine maintenance outlined in the Operator's Guide must be timely performed in order to maintain warranty coverage. AQUANAMI reserves the right to make warranty coverage contingent upon proof of proper maintenance.

AQUANAMI will not honor this limited warranty to any private use owner or commercial use owner if one of the preceding conditions has not been met. Such limitations are necessary in order to allow AQUANAMI to preserve both the safety of its products, and also that of its consumers and the general public.

## **6. WHAT TO DO TO OBTAIN WARRANTY COVERAGE**

The customer must cease using the AQUANAMI watercraft upon the appearance of an anomaly. The customer must notify an authorized servicing AQUANAMI dealer within three (3) days of the appearance of a defect, and provide it with reasonable access to the product and reasonable opportunity to repair it. The customer must also present to the authorized AQUANAMI dealer, proof of purchase of the product and must sign the repair/work order prior to the start of the repair in order to validate the warranty repair. All parts replaced under this limited warranty become the property of AQUANAMI.

## **7. WHAT AQUANAMI WILL DO**

AQUANAMI's obligations under this warranty are limited to, at its sole discretion, repairing parts found defective under normal use, maintenance and service, or replacing such parts with new genuine AQUANAMI parts without charge for parts and labor, at any authorized AQUANAMI dealer during the applicable warranty coverage

period under the conditions described herein. No claim of breach of warranty shall be the cause for cancellation or rescission of the sale of the AQUANAMI watercraft to the owner.

In the event that service is required outside of the country of original sale, the owner will bear responsibility for any additional charges due to local practices and conditions, such as, but not limited to freight, insurance, taxes, license fees, import duties, and any and all other financial charges, including those levied by governments, states, territories and their respective agencies.

AQUANAMI reserves the right to improve or modify products from time to time without assuming any obligation to modify products previously manufactured.

## **8. TRANSFER**

If the ownership of a product is transferred during the warranty coverage period, this warranty shall also be transferred and be valid for the remaining coverage period provided that AQUANAMI is notified of such transfer of ownership in the following way:

1. The former owner contacts an authorized AQUANAMI dealer and gives the coordinates of the new owner; or
2. AQUANAMI or an authorized AQUANAMI dealer receives a proof that the former owner agreed to the transfer of ownership, in addition to the coordinates of the new owner.

## **9. CONSUMER ASSISTANCE**

In the event of a controversy or a dispute in connection with this AQUANAMI limited warranty, AQUANAMI suggests that you try to resolve the issue at the dealership level. We recommend discussing the issue with the authorized AQUANAMI dealer's service manager or owner. If the issue has not yet been resolved, please submit your complaint below:

By phone: 1-562-513-5001

By email: [service@aquanami.com](mailto:service@aquanami.com)

By mail: Aquanami Assistance  
809 Grandview Dr.  
Hampstead, NC 2844

## US EPA EMISSION-RELATED WARRANTY

AQUANAMI warrants to the ultimate purchaser and each subsequent purchaser that this new engine, including all parts of its exhaust emission control systems meets two conditions:

1. It is designed, built, and equipped so it conforms at the time of sale to the ultimate purchaser with the requirements of 40 CFR 1045 and 40 CFR 1060.
2. It is free from defects in materials and workmanship that may keep it from meeting the requirements of 40 CFR 1045 and 40 CFR 1060.

Where a warrantable condition exists, AQUANAMI will repair or replace, as it elects, any part or component with a defect in materials or workmanship that would increase the engine's emissions of any regulated pollutant within the stated warranty period at no cost to the owner, including expenses related to diagnosing and repairing or replacing emission-related parts. All defective parts replaced under this warranty become the property of AQUANAMI.

For all emission-related warranty claims, AQUANAMI is limiting the diagnosis and repair of emission-related parts to the authorized AQUANAMI dealers, unless for emergency repairs as required by item 2 of the following list.

As a certifying manufacturer, AQUANAMI will not deny emission-related warranty claims based on any of the following:

1. Maintenance or other service AQUANAMI or AQUANAMI 's authorized facilities performed.
2. Engine/equipment repair work that an operator performed to correct an unsafe, emergency condition attributable to AQUANAMI as long as the operator tries to restore the engine/equipment to its proper configuration as soon as possible.
3. Any action or inaction by the operator unrelated to the warranty claim.
4. Maintenance that was performed more frequently than AQUANAMI specifies.
5. Anything that is AQUANAMI fault or responsibility.

### Emission-Related Warranty Period

The emission-related warranty is valid for the following period whichever comes first:

	HOURS	MONTHS
Exhaust emission-related components	175	30

### Components Covered

The emission-related warranty covers all components whose failure would increase an engine's emissions of any regulated pollutant, including the following listed components:

1. For exhaust emissions, emission-related components include any engine parts related to the following systems:
  - Air-induction system
  - Fuel system

- Ignition system
2. The following parts are also considered emission-related components for exhaust emissions:
- Carburetor
  - Fuel pump
  - Spark plug
  - Ignition coil
  - Electric control module
  - Crankcase ventilation valve

### **Limited Applicability**

As a certifying manufacturer, AQUANAMI may deny emission-related warranty claims for failures that have been caused by the owner's or operator's improper maintenance or use, by accidents for which the manufacturer has no responsibility, or by acts of God. For example, an emission-related warranty claim need not be honored for failures that have been directly caused by the operator's abuse of the engine/equipment or the operator's use of the engine/equipment in a manner for which it was not designed and are not attributable to the manufacturer in anyway.

***CUSTOMER  
INFORMATION***

**Watercraft Model Name** \_\_\_\_\_

**Hull**

IDENTIFICATION NUMBER (H.I.N.) \_\_\_\_\_

**Engine**

IDENTIFICATION NUMBER (E.I.N.) \_\_\_\_\_

**Owner** \_\_\_\_\_

NAME

STREET

CITY

STATE / PROVINCE

ZIP/POSTAL CODE

COUNTRY

**Purchase Date** \_\_\_\_\_ | \_\_\_\_\_ | \_\_\_\_\_ | \_\_\_\_\_  
YEAR MONTH DAY

**Warranty Expiry Date** \_\_\_\_\_ | \_\_\_\_\_ | \_\_\_\_\_ | \_\_\_\_\_  
YEAR MONTH DAY

To be completed by the authorized Aquanami dealer at the time of the sale.

DEALER IMPRINT AREA

DEALER IMPRINT AREA