USER MANUAL

ALL ON-LINE MANUALS

POP3921 MANUAL JETSURF COMBUSTION SE

PRO MODEL

JETSURF RACE DFI SL, JR-H1
JETSURF RACE DFI SKI, JR-G1
JETSURF CRUISER DFI , JC-A1, JC-B1
JETSURF TITANIUM DFI SL, JT-E1
JETSURF TITANIUM DFI SKI, JT-F1
JETSURF ADVENTURE 2 DFI , JA-E1, JA-F1

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The motosurfs were designed and manufactured by Motosurf World Cup and Formula 1 engineers in order to push the boundaries of water sports. The motorized surfboards created by Jetsurf are motorized surfboard that can be transported by hand, by car, by boat or by aeroplane (as personal luggage on international / domestic flights). This allows users of Jetsurf motorized surfboards to travel easily all over the world, which is a unique attribute compared to other motorized surfboard.

The parts and components of the motosurf are manufactured by MSR Engines s.r.o., based in the Czech Republic. The company specialises in the development of combustion engines and specialised electronics.

The motosurfs are manufactured in a single plant that uses the highest standards of manufacturing technology, using only the best materials and components currently produced in the European Union. This comprehensive in-house production enables Jetsurf to achieve maximum manufacturing precision and efficiency. Since 2017 the manufacturer has held ISO 9001 certification.

The motosurfs were developed with an exceptional effort to minimise the impact on the environment. By using specialised and the most advanced technologies, the designers have reduced the total weight of the motorized surfboard and Jetsurf accessories to under 20 kilograms. Jetsurf motorized surfboards meet homologation standards (for race registration) and standards relating to noise emissions, and comply with the emission limits set for engine surfboard, enforced by Greentech technology. The complete power unit is certified and approved by the European Commission and has been awarded the European Union CE mark. All these efforts to comply with international standards ensure that the motorized surfboards also comply with the North American U.S. EPA requirements relating to personal watercraft.

The information contained in this user manual represents the most up-to-date product data at the time of printing. As MSR Engines is committed to the continuous improvement of products and the development of technologies, the company reserves the right to change the product, components, specifications or other aspects relating to Jetsurf motosurfs without prior notice or any obligation to fit previously manufactured Jetsurf motosurfs with these changes. You will find current changes on the Jetsurf website ***(www.jetsurf.com)***. Check the website regularly.

This user manual for owners or users (hereinafter the “user manual”) cannot anticipate all the circumstances associated with owning or operating motosurfs. MSR Engines strongly recommends that owners and users regularly check the website of the Navigation Authority ***(www.plavebniurad.cz)*** for the Czech Republic, or the relevant information of the coast guard and/or the authority that regulates the laws relating to the use of personal watercraft, with particular regard to information relating to personal watercraft. Also follow the Jetsurf website ***(www.jetsurf.com)***, where you will find updates and product information.

In some countries a certificate of competence or authorisation to operate a vessel is required, or special regulations apply.

The manual is intended to help you operate your motosurf easily and safely. It contains a detailed description of the motosurf and its supplied or built-in equipment, and information on their operation and maintenance. Please read it carefully and familiarise yourself with the vessel before using it.

Do not set out if the expected navigation conditions (wind force and wave height) do not match the design category of your motosurf and you are unable to safely operate the vessel in those conditions.

This user manual is not a detailed guide to maintenance or repairs. In the event of problems, contact the authorised motosurf dealer or its manufacturer. If you have a maintenance manual available, follow it when maintaining the motosurf.

Maintenance, repairs and modifications of the motosurf must always be carried out by trained and competent persons. Modifications that may affect the safety characteristics of the motosurf must be verified, carried out and documented by a competent person. The motosurf manufacturer cannot accept liability for modifications it has not itself approved.

Always maintain your motosurf properly and expect a deterioration in its condition that comes with time and as a result of demanding operation or poor handling.

Every motosurf, regardless of its durability, can be severely damaged if it is not used correctly. This is incompatible with safe navigation. Always adapt the speed and course of the vessel to the navigation conditions (wind force and wave height).

The person on the motosurf must have suitable flotation aids described in the chapter PERSONAL FLOTATION DEVICES in this manual. It should be noted that in some countries the law requires flotation aids to be worn during any handling and use of the motosurf, so it is necessary to comply with their national laws.

PLEASE KEEP THIS MANUAL IN A SAFE PLACE AND PASS IT ON TO THE NEW OWNER IF YOU SELL THE VESSEL.

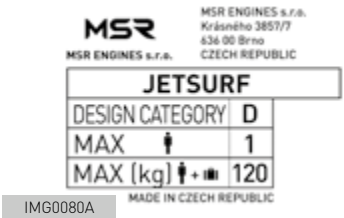
2 IDENTIFICATION AND WARNING LABELS

2.1. MOTOSURF IDENTIFICATION LABEL

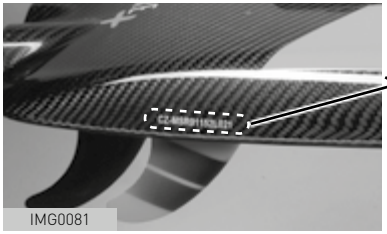
The vessel's identification label is attached in the engine storage compartment, see image **(A)**. Information that is not given on this label can be found in the relevant chapter of this manual.



IMG0080



IMG0080A



IMG0081

The vessel's hull identification number is also located on the starboard side near the stern.

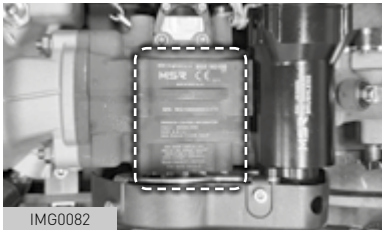
CZ-MSR123ABC123

or for the USA::

JSU123ABC123

2.2. ENGINE IDENTIFICATION LABEL

The engine serial number and exhaust emissions control information are marked on the top part of the engine.



IMG0082



IMG0082A

Before using this vessel, read the following warning notices. If you have any questions, consult your Jetsurf dealer.

2.3. WARNING NOTICES

Sticker MSR0316/H1 located on the front of the float.

Sticker MSR0116/M2 located on the ignition coil cable.

Sticker MSR0519/D1 located on the underside of the engine compartment cover.

Sticker MSR0718/D2 located on the underside of the engine compartment cover.

Warning notice engraved on the fuel tank cap.

Warning notice engraved on the front of the ignition unit (ICU).

1


Read the manual!
WARNING
WARNING
DO NOT TRANSPORT JetSurf™ WITH GASOLINE IN THE TANK!
MSR 0119/M1

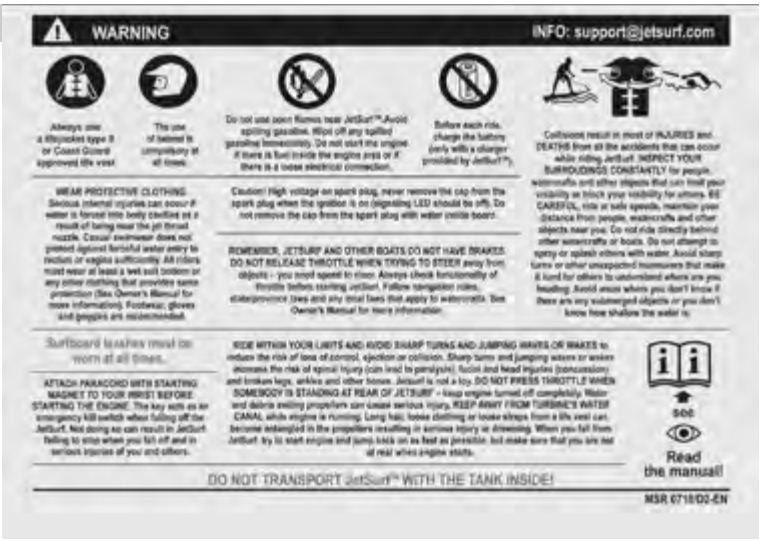
2


MSR 0116/M2-CZ
DANGER
When testing sparks on spark plugs, ALWAYS use mounting tool for spark plug testing.
DANGER
When testing sparks on spark plugs, ALWAYS use mounting tool for spark plug testing.
MSR 0116/M2-CZ

3


www.jetsurf.com
JETSURF
Read the manual!
THE CHECKLIST FOR THE ENGINE AND THE CONTROL UNIT THAT NEEDS TO BE PERFORMED BEFORE EVERY RIDE:
1) Charge the batteries in the ICU.
2) Fill the tank with premixed petrol (min. octane rating 95 – Natural 95, Super 95) and oil to the ratio of 50:1 (10 litres of petrol : 0.2 litres of oil). Use only oil intended for two-stroke jet ski/ watercrafts or two-stroke combustion engines.
3) Check the connection of the two hoses to the cooling system of the engine and the hose to the cooling system of the exhaust, both visually and applying a slight pulling force.
4) Check the connection of all the control unit connectors.
5) Check the spark plug. Check the spark plug boot and push it down if necessary. Check the spark plug boot holder so that it could not get loose during the ride.
6) Inspect the throttle control and fuel system.
7) Before riding (once a day is sufficient), spray the engine parts with MOTOREX INTACT MX 50 (oil).
8) Start the engine, check the engine operation and throttle control. The engine can run without cooling for maximum 10 seconds (the temperature of the cylinder should not be higher than 65 °C/ 149 °F)!! Otherwise it could result in permanent damage to the engine and exhaust system.
IMMEDIATELY AFTER RIDING:
1) Pull the JetSurf™ onto the shore, put it on the ground with the nose up and wait until the rest of the water from inside of the board drains out.
2) Start the engine in the nose up position, rev fence and let it run for 3 to 4 seconds (this will remove water from the exhaust system), the engine can run without cooling maximum for 10 seconds, the temperature of the cylinder should not be higher than 65 °C/ 149 °F!! Otherwise it could result in permanent damage to the engine and exhaust system.
3) Wash JetSurf with freshwater including the inner space and engine and then let the engine run for about 5 seconds. Let the inner space dry out and spray the whole engine thoroughly with oil – e.g. MOTOREX INTACT MX 50 or other oil not damaging plastic.
4) Charge the batteries in the ICU.
5) Do not store the JetSurf™ with the engine bay closed.
MSR 0119/D1-EN

4



5



6



BATTERY Li-Ion 100 Wh (9 Ah)
NOMINAL VOLTAGE 11.1 V
MAX.CHARGING VOLTAGE 12.6 V

MSR ENGINES s.r.o.
MADE IN CZECH REPUBLIC

3 SAFETY NOTICES

BEFORE USING THE Jetsurf MOTORISED SURFBOARD FOR THE FIRST TIME, READ THIS ENTIRE USER MANUAL.

If any of the information is not entirely clear to you before putting the motorized surfboard into operation, contact the authorised dealers, who will provide you with further information and explanations. At Jetsurf, safety comes first, and it is necessary for all owners and users to give it the same attention.

This user manual cannot anticipate all the circumstances associated with maintaining and operating the motorized surfboard. It provides basic safety information and is not all-encompassing. MSR Engines strongly urges all owners and users to regularly review the safety information of the U.S. Coast Guard ***(www.uscg.mil and www.uscgboating.org)**** and to follow other websites and authorities focused on vessel safety that apply to the relevant areas/ regions by which the operation of the Jetsurf motorized surfboard should be governed.

Safety warning symbols are used to draw attention to potential dangers of injury. Follow all the safety instructions given with the symbols in order to prevent possible injury or death.



DANGER
Indicates the existence of a high danger of possible death or serious injury if safety measures are not observed.



WARNING
Indicates the existence of a danger of injury or damage to the vessel or part of it if safety measures are not observed.



CAUTION
Recalls safety principles or directly warns of a dangerous activity that could cause injury or damage to the vessel or part of it.



NOTE
Indicates reminders or recommended procedures.

These warning icons appear throughout this user manual.

3.1. DEFINITIONS

"Motorised board" or "motorised surfboard" — abbreviated in this manual to "surfboard", "board" or "craft" — are interchangeable terms and mean a craft that uses a built-in combustion engine. The engine drives a jet pump, which is the primary source of propulsive force. The Jetsurf is designed to be operated by a person ("rider" or "user") who stands or kneels on the craft. The direction of travel of the Jetsurf is controlled by the rider leaning, and the speed is controlled by the throttle lever located in the control handle.

* Applies to the USA.

3.2. GENERAL COMMON SENSE



Warning
It is the responsibility of the owner and/or user to act in accordance with the safety-related rules given in this user manual and to regularly review the safety information provided by government agencies and the local jurisdiction. Owners/users should at all times be guided by common sense, regardless of whether the engine is running or at rest. Failure to observe these instructions may result in serious injury or death.

It is important for all owners and users to be prepared to maintain and operate the motorized surfboard responsibly and with common sense.

Riders are reminded that general common sense should be the rule for all outings. Although some objects are visible above the surface and can be easily avoided, it is essential to also pay particular attention to objects below the surface.

Considerations based on common sense are important for the safety of riders and users of other surfboard, boats and passengers on board. Also be guided by common sense when maintaining the motorized surfboard, so as to keep the vessel in good condition for as long as possible.

MSR Engines cannot anticipate every type of activity or negligent handling that could lead to death/injury or damage. The user accepts responsibility for using the motorized surfboard in a safe and reasonable manner. Particular attention must be paid to the surroundings and accidents must be prevented at all times. It is also necessary to ensure that situations are avoided in which carbon monoxide exhaust gases could accumulate in the space between objects or be released out of the water. Familiarise yourself well with the information on carbon monoxide poisoning contained in chapter 3.4.

Familiarising yourself with the operation of surfboard in the waters where the motorized surfboard will be operated is extremely important.

Currents, especially strong ones, can affect the performance of the motorized surfboard and endanger the safety of the user. Watch out for buoys and other markings.



Warning (Risk of injury)
All riders must at all times wear a helmet, life jacket and safety leash when handling and riding, in order to prevent serious injury or death in the event of an accident (details are given in chapter 3.5.).

3.3. CARBON MONOXIDE



Warning (Risk of injury)
Carbon monoxide (CO) is a gas and can be very difficult to detect, as it has no colour, taste or smell and can accumulate unnoticed. Exposure to carbon monoxide can be fatal within a few minutes. The effects of CO due to cumulative and repeated exposure to low amounts can have a similar effect to a single exposure to a high concentration. Carbon monoxide must be avoided and any exposure should be treated immediately.

The exhaust is deliberately located at the stern (rear) of the motorized surfboard. Although the emissions from the engine are relatively low due to its purpose-built design, which under normal operation vents into the water, some of the CO fumes remain as a natural by-product of the combustion engine. Riders must therefore handle the motorized surfboard in accordance with how it was designed. No one should ever be towed by the motorized surfboard while it is in operation.

CO enters the human body through the lungs and blocks oxygen. Milder symptoms of poisoning include headaches, nausea, itchy or irritated eyes and dizziness. Victims are often suddenly weak and disoriented. These symptoms should not be confused with alcohol intoxication.

In individuals who suffer from respiratory or heart problems, the effects may appear more quickly. The symptoms can also be accelerated by the use of alcohol and tobacco products. All riders, regardless of their state of health or food intake, should bear in mind that physical activity also speeds up the absorption of carbon monoxide.

In the event that someone shows symptoms of CO poisoning, immediately switch off the motorized surfboard and any other combustion engine nearby. If possible, move the affected person to fresh air, away from the area of CO concentration. Provide first aid and seek professional medical assistance immediately.

3.4. ENGINE PREPARATION



Warning (Risk of injury)
Touching any part of a running engine, especially any part that moves, can result in serious injury or death. If for any reason it is necessary to gain access to the engine, the engine must be switched off. The engine can heat up while running and burns to the skin can occur if it is not allowed to cool down before any work.



Warning (Risk of injury)
Always transport fuel only in canisters approved by the D.O.T. (USA) or CE (Europe) organisation. Transporting fuel in the fuel tank and in the engine can result in damage to the Jetsurf or injury to persons. Fuel vapours are even more unstable, explosive and generally more dangerous than liquid fuels. Therefore, never transport the Jetsurf with the tank inside the surfboard. The transport of the Jetsurf is described in detail in the Transport chapter.



Warning (Risk of injury)
Users should also regularly verify that the engine is correctly installed and firmly attached to the float. Do not attempt to start an engine that is not firmly attached.

Neither users nor bystanders must ever touch any part of a running engine.

Prevent any object, including small particles (algae, sand, small animals, etc.), from coming into contact with the engine. This could lead to engine damage that will not be covered by the warranty.

When starting the engine, make sure that people (especially children) are at least 10 m (33 feet) away.



Warning (Risk of injury)

Operating the engine of the motorized surfboard out of the water for more than 10 seconds can result in permanent damage to the engine and exhaust system - the cylinder temperature must not exceed 65 °C (149 °F). Such damage is not covered by the warranty.



Warning (Risk of injury)
Use only spare parts approved by the manufacturer MSR Engines. The use of other spare parts will void the warranty and may adversely affect the operation and safety of the motorized surfboard.

The engine was designed and manufactured only as the power unit of the Jetsurf motorized surfboard. Never use the engine for any other type of vessel. Such use is expressly prohibited.



Note

Later in this user manual you will find instructions for the proper preparation and maintenance of the motorized surfboard's engine. Be sure to read and follow these instructions.

3.5. CLOTHING



Warning (Risk of injury)
Anyone near the moving parts of the motorised surfboard's engine must take care of their own safety and keep clothing and hair well away from those moving parts, as injury may result.

Because the engine contains moving parts, owners/users should never wear loose clothing while the engine is running. Straps, buckles and loose edges of fabric can become caught in the moving parts of the Jetsurf.
Long hair must be tied back so that it cannot become entangled in the moving parts of the Jetsurf.Near the jets, internal injuries may occur as a result of water entering body cavities. Ordinary swimwear does not provide adequate protection against the forceful entry of water into the rectum or vagina. All riders must wear at least the lower part of a wetsuit, or any other garment offering equivalent protection. Footwear, gloves and protective goggles are also recommended.
Helmets are mandatory items of safety equipment and must be worn at all times during use. Every user — including experienced riders — should expect to fall off the motorised surfboard from time to time. A helmet provides protection should the user strike their head against the board. Helmets should be designed to be worn in water, so that they fit well and are relatively lightweight. The manufacturer, MSR Engines, makes no representation or promise regarding protection, including the protection provided by helmets.

Use of a safety leash on the arm or leg is mandatory, and it must be worn whenever the Jetsurf is in use.

3.6. PERSONAL FLOTATION DEVICES (PFD)

It is the responsibility of the owner/user to act in accordance with all laws, statutes and requirements relating to personal safety. US federal law in most cases requires the wearing of personal flotation devices (PFDs) approved by the U.S. Coast Guard*. State and local laws and statutes may differ from federal requirements.

Since Jetsurf motorized surfboards are generally defined as personal watercraft, it is essential that all users contact the local authorities for all information relating to the use of safety accessories. MSR Engines accepts no liability for users' actions that are not in accordance with the relevant laws applying to the use of personal watercraft in each specific location.

Authorised Jetsurf dealers are able to help owners and users obtain the proper equipment in accordance with the conditions and laws of the given country.

3.7. LAW ENFORCEMENT

During full operation, users may be asked to stop surfing and allow the U.S. Coast Guard* or state law enforcement personnel to pull alongside the vessel. Some countries, states and jurisdictions may require a certain minimum age to operate a motorized surfboard, the completion of training and/or possession of a user licence. Requirements vary greatly. Where access by minors is permitted, this surfing should be carried out only under the supervision of an adult.

* Applies to the USA.

Each year, re-familiarise yourself with the requirements regarding the legal aspects and safe operation of the motorized surfboard.

3.8. UNDER THE INFLUENCE OF ALCOHOL OR DRUGS

Under no circumstances may the rider of the motorized surfboard be under the influence of alcohol or drugs, including prescription medicines that have potentially disorienting side effects. This can be just as dangerous as driving a car in a similar situation!

3.9. REGISTRATION

In many jurisdictions it will not be necessary to register the motorized surfboard for its main purpose of use. However, because the surfboard is motorized, registration may be required. Before first use, contact the local government bodies operating in the area where the motorized surfboard will be used most.

3.10. EXCEEDING SPEED / NOISE LIMITS

Some areas have restrictions relating to speed in connection with wave creation and maximum noise levels.

Users of motorized surfboards are obliged to comply with these requirements.

3.11. ELECTRONIC DEVICES

Operating the motorized surfboard requires full attention. MSR Engines strongly recommends leaving mobile phones (including waterproof models), radios, players and other devices on land during outings. Distraction can potentially lead to accidents.

3.12. JUMPING ON THE JETSURF

NEVER JUMP with the motorized surfboard! Damage caused by improper use of the Jetsurf (for example jumping) is not covered by the warranty.

3.13. REPORTING ACCIDENTS AND INSURANCE

Most laws require the reporting of accidents in which:

- A person dies.
- A person disappears from the vessel in a situation that could result in death or serious injury.
- A person is injured and needs medical assistance beyond first aid.
- Damage to the vessel and/or property occurs that exceeds the amount set by law. The total amount may be lower in some jurisdictions and it is the responsibility of the owner/user to verify its level.
- The motorized surfboard is destroyed.

In any case where other surfboard or persons find themselves in distress, users of the motorized surfboard are required by law to provide them with assistance, provided that this would not endanger the user of the motorized surfboard themselves.

The owner of the motorized surfboard is generally responsible for damage or injury that may occur even when the motorized surfboard is used by another person. Owners must not allow any other person to use the Jetsurf without prior instruction regarding correct use and the associated risks. Owners are strongly advised to obtain suitable liability insurance and property insurance in case of possible court rulings in these cases. Theft and damage that occurs on land are further reasons for insurance.

3.14. WASTE AND POLLUTION

The U.S. Coast Guard* and/or the relevant authority that manages the areas where the Jetsurf is used provides detailed information on waste disposal. As a general rule, waste, even biodegradable waste, must be disposed of properly on the shore.

If the user has the impression that substances that could pollute the water are escaping from the surfboard during its operation, we recommend presenting the surfboard to an authorised Jetsurf dealer for repair. The laws and regulations relating to pollution are strict in most areas.

3.15. OTHER SAFETY MATTERS

Riders should:

- Be at least sixteen (16) years of age, or the minimum age required within the jurisdiction in which the motorized surfboard is operated. The motorized surfboard was designed for adults.
- Use suitable protective equipment, in particular a helmet, life jacket and safety leash.
- Ensure that the motorized surfboard is in excellent condition and at the same time as well prepared as possible for operation. Make sure the battery is functional and well charged so that you do not become stranded far from shore.
- Avoid operation in bad weather, including but not limited to strong winds, rain with reduced visibility, warnings of approaching dangerous weather, high waves or any weather in which the rider generally feels uncomfortable.
- Not use the motorized surfboard if the air temperature is below 5 °C.
- Avoid prolonged operation in water that is too shallow or brackish. The engine of the motorized surfboard is driven by a jet pump, and algae and other plants can lead to clogging of the engine intake. If you suspect that contaminants or small objects have got into the cooling system (the flow of water coming from the cooling system water outlet decreases or the water stops flowing altogether), stop immediately and carry out the routine maintenance of cleaning the cooling system.
- Maintain a speed and riding style that allow the rider to avoid collisions with objects (above and below the waterline), buoys, landing docks, the shore and other surfboard.
- Know and apply the navigation rules and regulations.
- Ride the motorized surfboard alone. The motorized surfboard is designed for one (1) person of average size.
- Never exceed the maximum specified load capacity.
- Maintain a line of direct visibility, which means that there should never be another person in front of it while riding.
- Not use the motorized surfboard to transport items. It is essential that the rider maintains control over the motorized surfboard with the control lever. The rider should never be distracted and should be in full control of the motorized surfboard.
- Always have the magnet and the cord with the paracord wristband attached around the wrist. When the rider falls, the engine stops immediately.

*Applies to the USA.

3.16. SAFE OPERATION ON THE WATER

Laws, rules, regulations and the manner of their enforcement have been created throughout the world with the aim of ensuring the safe and orderly operation of all surfboard. Familiarising yourself with all the applicable regulations of the authorities managing the waters in which the motorized surfboard will be operated is the responsibility of the owner and/or user.

Information for users in the Czech Republic can be found on the website:

- ***www.plavebniurad.cz***

Information for users in the United States can be found on the website:

- ***www.uscg.boating.org***

Information for users in Canada can be found on the website:

- ***www.tc.gc.ca/eng/marinesafety/menu.htm***

Other countries have their own laws or participate in international rules. Always check the markings and rules that apply to any bodies of water on which operation will take place.

3.17. GENERAL RULE OF PRUDENCE

Rule 2 in the International Rules states: "In applying and interpreting these rules, it is necessary to take into account all safety aspects of navigation and collision, and any special circumstances that may cause a departure from the above rules in order to avoid immediate danger."

3.18. GENERAL RULES

Always use good judgement when encountering other surfboard. The motorized surfboard is considered a motorized vessel and is expected to give way to surfboard that have less manoeuvring ability. The vessel that does not have right of way is obliged to take correct and timely measures to stay out of the path of the vessel that has right of way. Under normal circumstances, the vessel that does not have right of way should not enter the path of the vessel that has right of way. Always move in such a way that the vessel that has right of way can observe your manoeuvre.

When you encounter another motorized vessel, there are three (3) main situations to be observed in order to avoid a collision:

- Meeting (i.e. approaching another vessel head-on);
- Crossing (i.e. crossing the path of the other vessel);
- Overtaking (i.e. overtaking or being overtaken by another vessel).

When meeting another vessel head-on with a risk of collision, neither vessel has right of way. Both surfboard must change course to avoid an accident. Keep the other vessel on your port side (left side), unless it is possible to avoid each other by maintaining course.

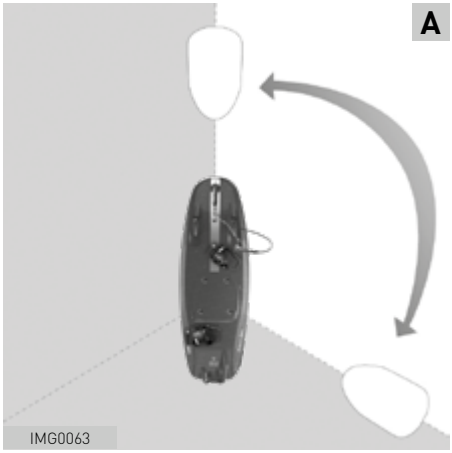
When two (2) motorized surfboard cross paths with a risk of collision, the vessel that sees the vessel crossing its path on the starboard side (right side) must give way.

When overtaking, you have right of way. The other vessel is expected to maintain course and speed. When overtaking, avoid it. When being overtaken by another vessel, maintain course and speed so that the overtaking vessel can avoid you.

When you are about to turn on the water, blow a long whistle for four (4) to six (6) seconds. Regardless of whether you hear a response, proceed with caution.

Under normal operating situations, stationary fishing boats and sailing boats (at rest or moving) have right of way.

Always familiarise yourself in advance and watch out for buoys and other markings. The Uniform State Waterway Marking System was designed for inland waterways in the United States. Markings may differ depending on geographical location. Before using the motorized surfboard in unfamiliar waters, always check with the relevant authorities.



IMG0063

MEETING

When two surfboard approach each other on the water, one vessel has right of way and is referred to as the "vessel that has right of way". The other vessel must give way or yield to the first and is referred to as the "vessel that gives way". To illustrate: in image **(A)** you are the Jetsurf in the middle. You are required to give way to any vessel in the white field (you are the "vessel that gives way"). Any vessel in the darker area must give way to you (you are the "vessel that has right of way"). If you are both heading directly towards each other, image **(B)**, you must both give way. You should turn to the right, thereby keeping the approaching vessel on your left side, i.e. your port side. This rule does not apply if the surfboard avoid each other, provided you continue on the set course and speed.



IMG0064


IMG0065

CROSSING

If your path and that of another vessel cross at such a distance that there is a risk of collision and the other vessel is on your starboard side (right side), you must avoid it or stay out of its path. In the event that the other vessel is on your port side (left side), maintain the same course and speed until the other boat avoids you in accordance with the rules.

OVERTAKING

When overtaking another vessel, you are the “vessel that gives way”.

The other vessel is expected to maintain course and speed, and you are required to stay out of its path until you have overtaken it. In the event that another vessel is overtaking you, you should maintain your direction and speed so that the overtaking vessel can safely pass around you.

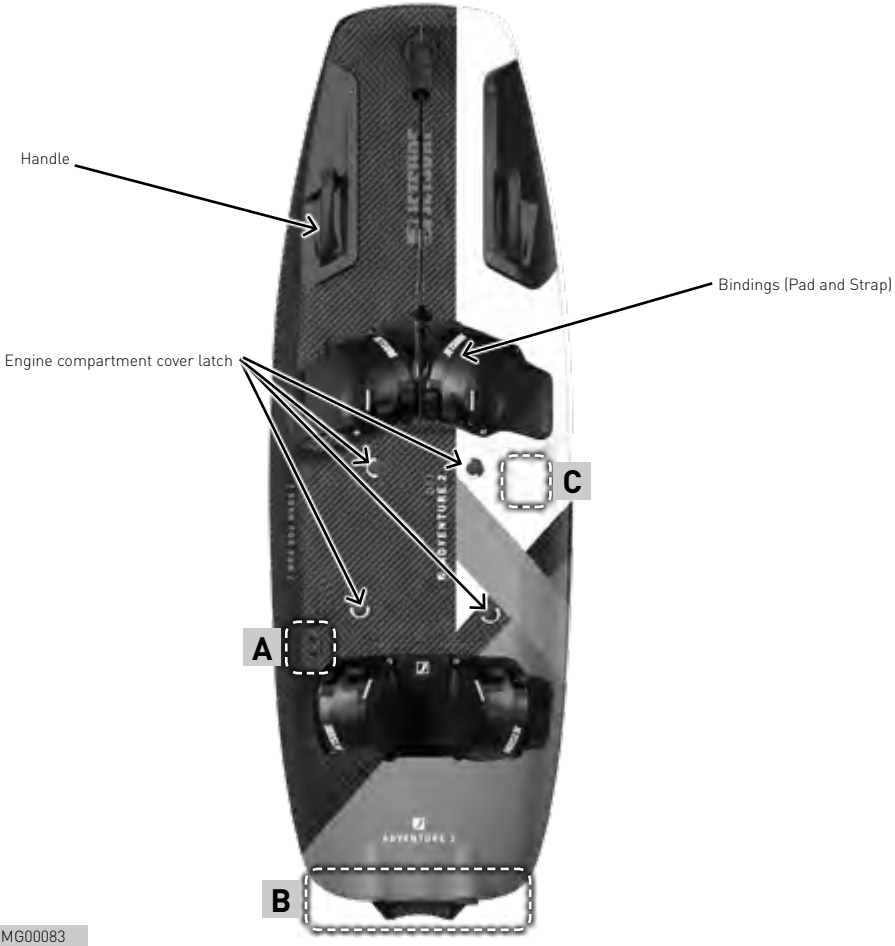


IMG0066

MSR Engines cannot anticipate every situation that may arise while riding. The information we provide here is general and may not apply in the territory where you ride the motorized surfboard. Always carry out a thorough check, with an emphasis on safety, as part of your preparation and planning.

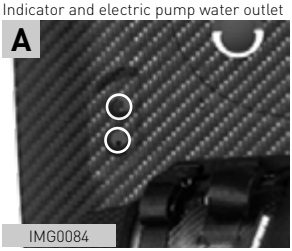
4 SURFBOARD OVERVIEW

4.1. DESCRIPTION OF THE JETSURF ADVENTURE 2 DFI



IMG00083

Indicator and electric pump water outlet



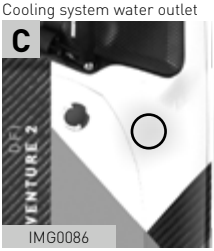
IMG0084

Exhaust tip / silencer / ECA



IMG0085

Cooling system water outlet



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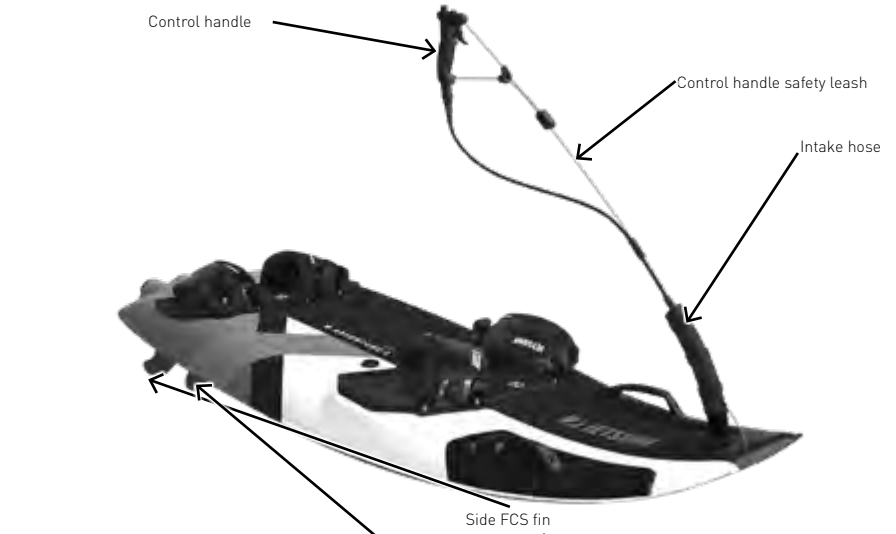
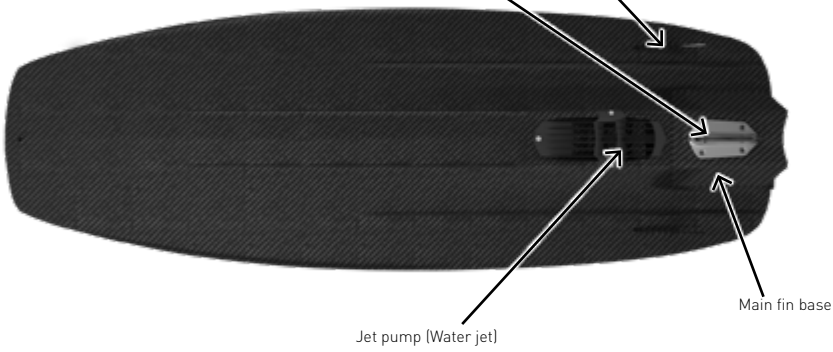
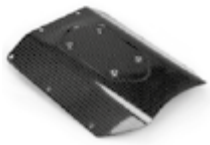


IMG0087



IMG0088

Main fin base



IMG0003

Main fin FCS plug



IMG0068

Main FCS fin



IMG0067

Side FCS fin

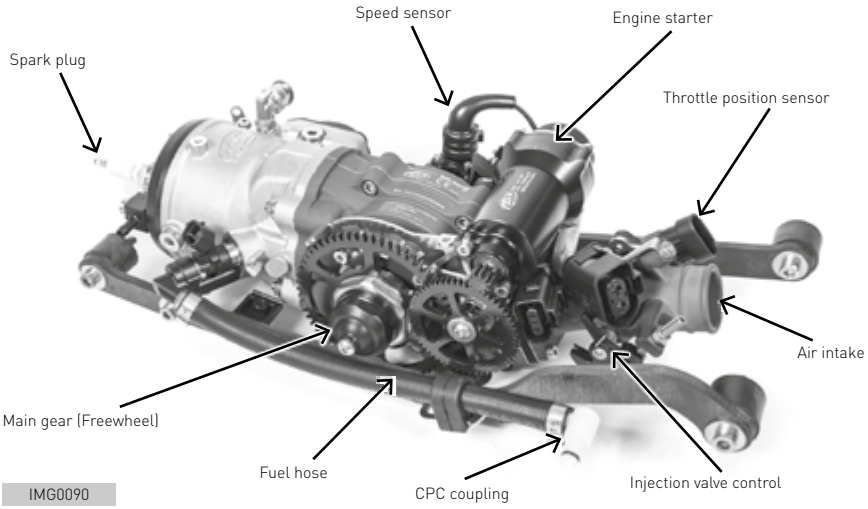


IMG0089

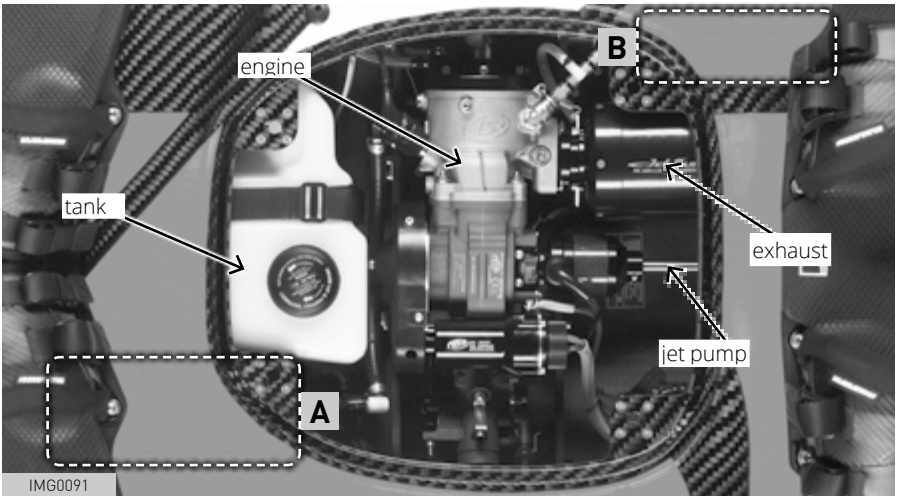
Intake screen



IMG0163



IMG0090



IMG0091

ICU **A**



IMG0092

Ignition coil DFI **B**



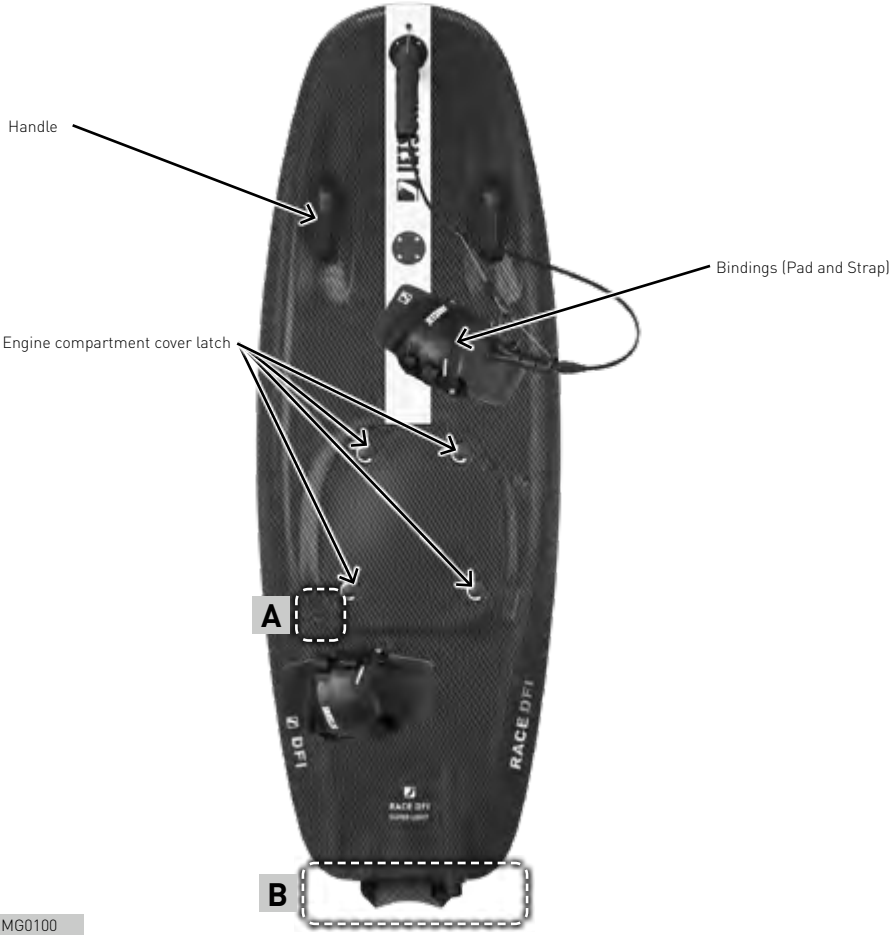
IMG0093

4.2. Standard EQUIPMENT JETSURF ADVENTURE 2 DFI

ITEM	CODE	QUANTITY
FCS Accelerator Large Neo Glass - Side fin	R06Z081	2
Manual Jetsurf Petrol	-	1
DFI battery charger 110V / 220V	POA0174	1
Tools in Adventure DFI case	POA0161	1
Control handle safety leash	P006034	1
Stand bag	-	1
Centre fin flange	P015525	1
FCS II Connect GF 7" - Centre fin	R06Z082	1
V5 chassis	A001346	1
Standard EQUIPMENT Board Bag	POP0235	1
Stand	A000359	1
Screw DIN 7991 TX M6 x 12 A4-80	P011857	12
Technical certificate, small	P007808	1
Technical certificate, large	P007807	1
Base edge protector	POP0234	1
Shipping bag for fins	-	1
Foam protection for the rear of the float	-	1

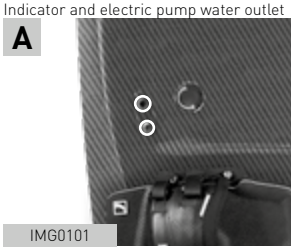
TOOLS IN THE ADVENTURE DFI KIT:		
ITEM	**CODE**	**QUANTITY**
Tool and charger case	R06Z060	1
Magnet	A000351	2
Allen screwdriver SW 4.0	P006291	1
Screwdriver ph2x100	P006292	1
O-ring 4.7 x 1.6 FPM	P012776	1
Spark plug spanner	P007806	1
NGK BPR7HS spark plug	A000353	2
DFI spark plug tester	POA0160	1
Throttle stop	A000200	1
Cleaning the cooling system	A002091	1

4.3. DESCRIPTION OF THE JETSURF RACE DFI SL



IMG0100

Indicator and electric pump water outlet



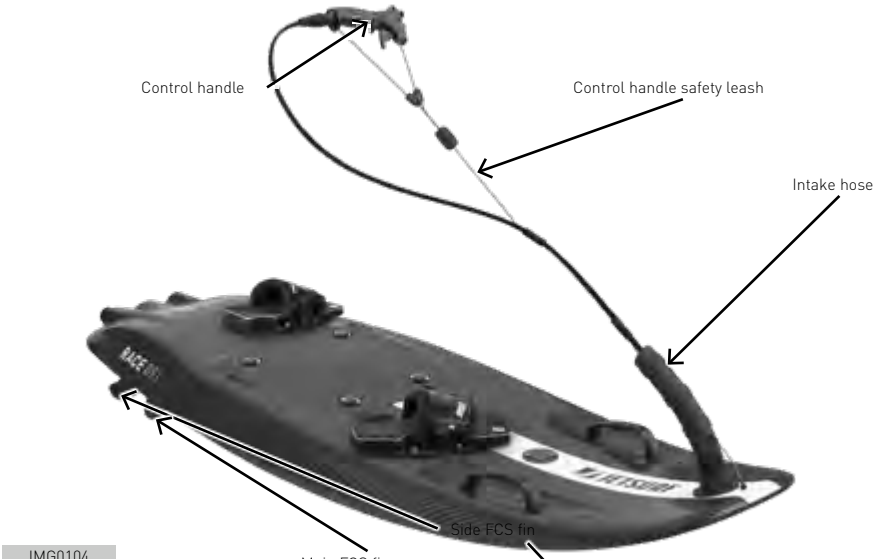
IMG0101

Exhaust tip / silencer / ECA

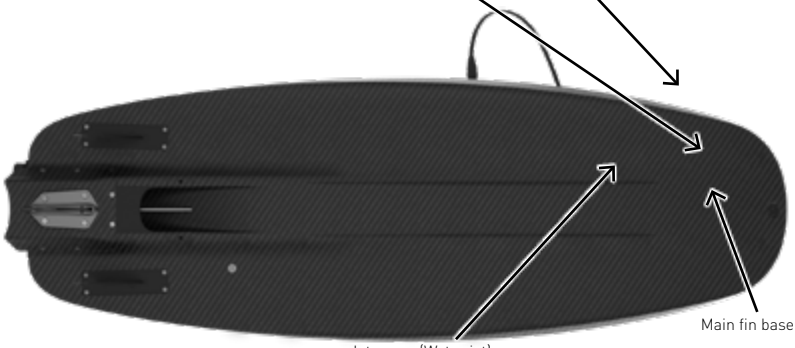


IMG0102

SURFBOARD OVERVIEW

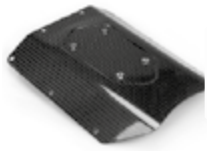


IMG0104



IMG0088

Main fin base



IMG0003

Main fin FCS plug



IMG0068

Main FCS fin



IMG0067

Side FCS fin

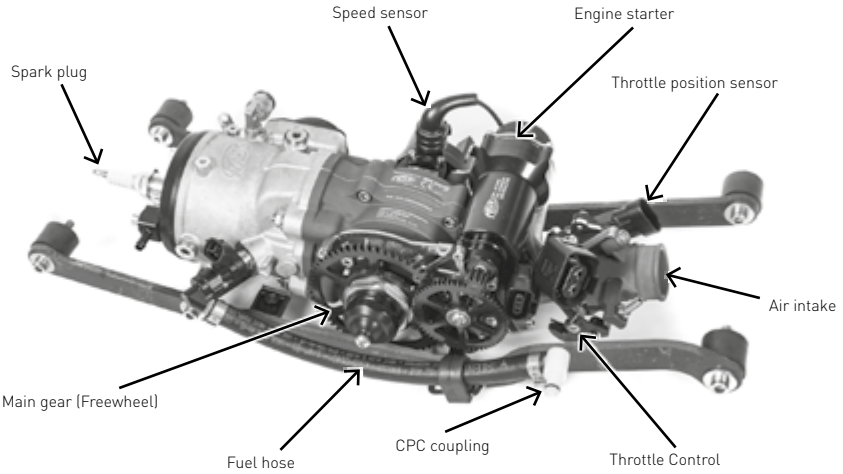


IMG0026

FCS Fins ADJUSTER PLUG



IMG0152



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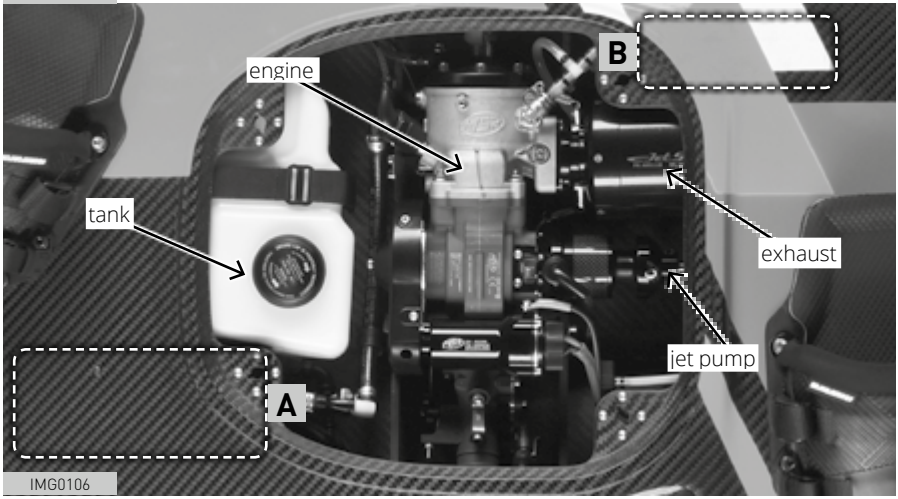


IMG0106

ICU **A**



IMG0092

Ignition coil DFI **B**



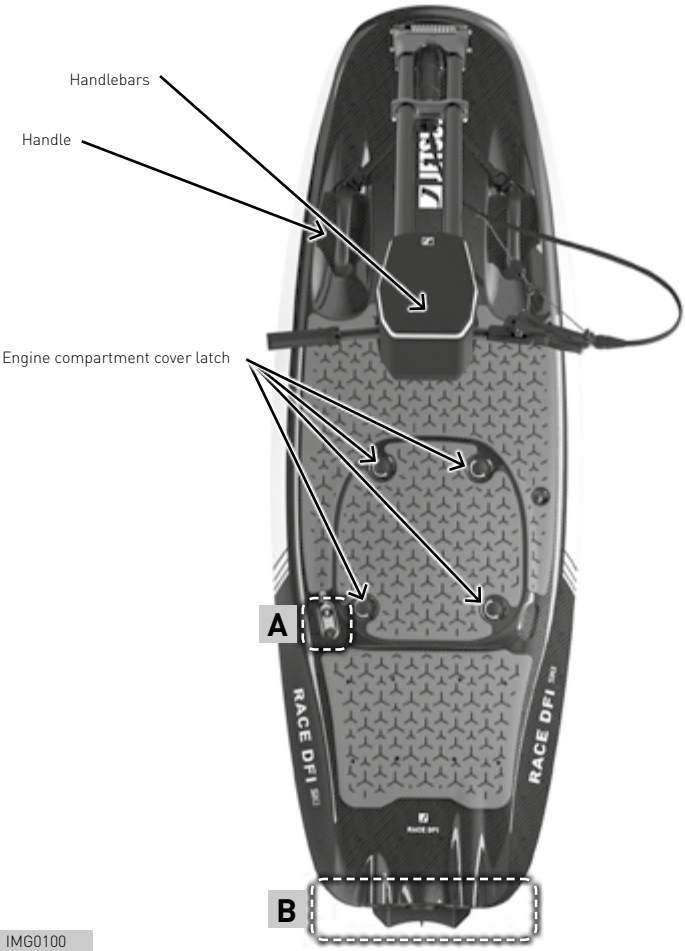
IMG0093

4.4. Standard EQUIPMENT RACE DFI SL

ITEM	CODE	QUANTITY
FCS II Performer Black Medium - Side Fin	R06Z083	2
Manual Jetsurf Petrol	-	1
Battery charger DFI 110V / 220V	POA0174	1
Tools in a case Adventure DFI	POA0161	1
Control handle safety leash	P006034	1
Stand cover	-	1
Main fin FCS plug	P015525	1
FCS II Connect GF 7" - Main Fin	R06Z082	1
Wheels for bags	A001346	1
Standard EQUIPMENT Board Bag	POP0235	1
Stand	A000359	1
Screw DIN 7991 TX M6 x 12 A4-80	P011857	12
Small Technical Certificate	P007808	1
Large Technical Certificate	P007807	1
Main fin base protection	POP0234	1
Travel case for fins	-	1
Foam protection for the rear of the float	-	1

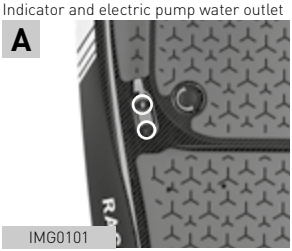
TOOLS IN THE RACE DFI SL:		
ITEM	**CODE**	**QUANTITY**
Tool and charger case	R06Z060	1
Magnet	A000351	2
Allen screwdriver SW 4.0	P006291	1
Screwdriver ph2x100	P006292	1
O-ring 4.7 x 1.6 FPM	P012776	1
Spark plug spanner	P007806	1
NGK BPR7HS spark plug	A000353	2
DFI spark plug tester	POA0160	1
Throttle stop	A000200	1
Cleaning the cooling system	A002091	1

4.5. DESCRIPTION OF THE JETSURF RACE DFI SKI



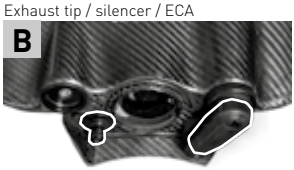
IMG0100

Indicator and electric pump water outlet

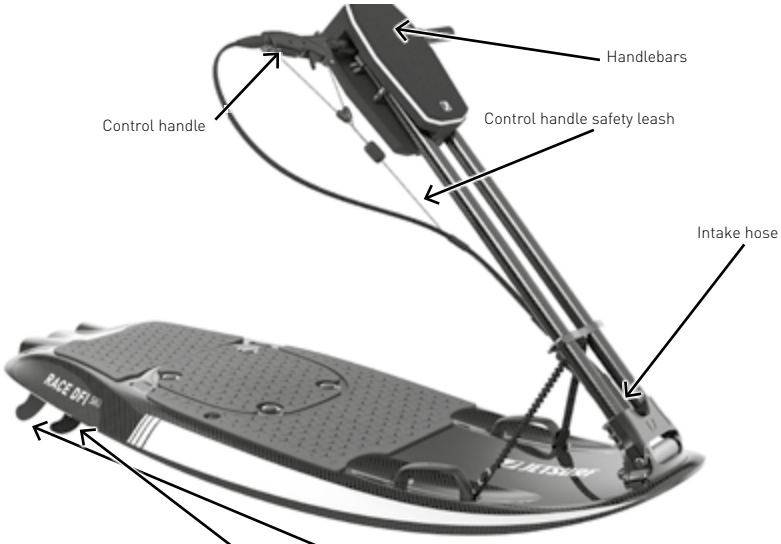


IMG0101

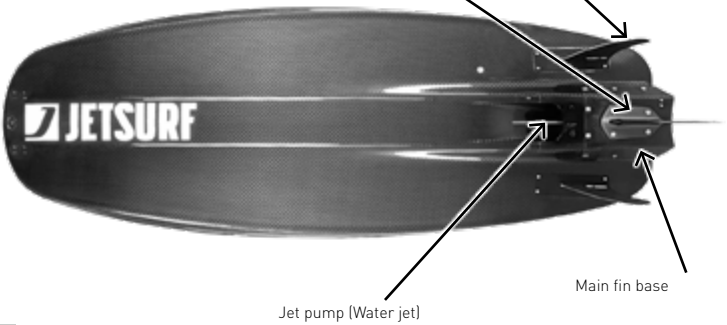
Exhaust tip / silencer / ECA



IMG0102

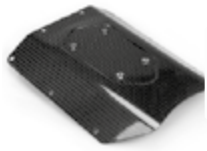


IMG0104



IMG0088

Main fin base



IMG0003

Main fin FCS plug



IMG0068

Main FCS fin



IMG0067

Side FCS fin

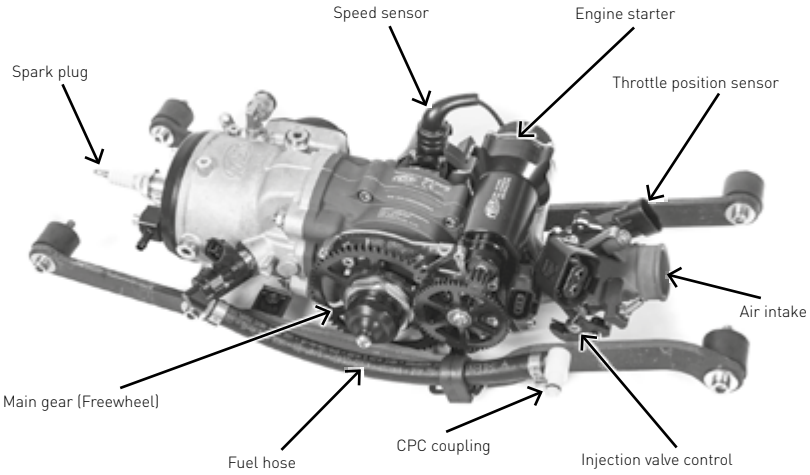


IMG0026

FCS Fins ADJUSTER PLUG



IMG0152



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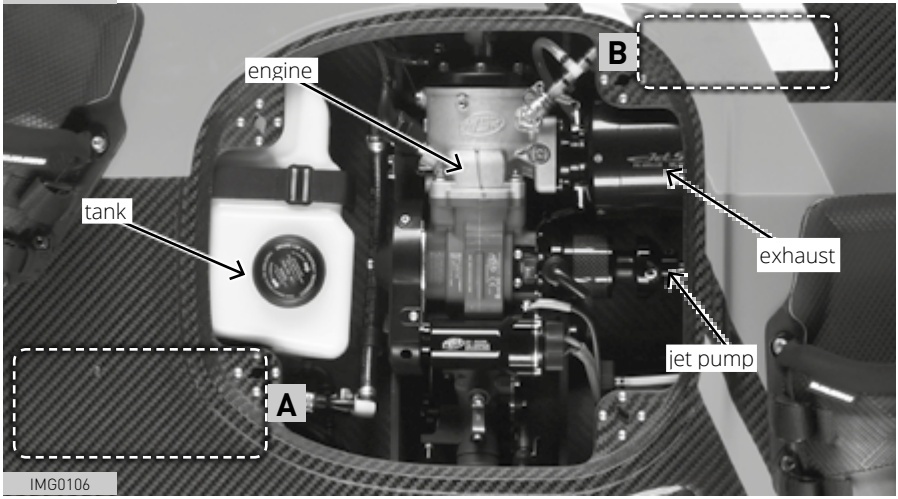


IMG0106

ICU **A**



IMG0092

Ignition coil DFI **B**



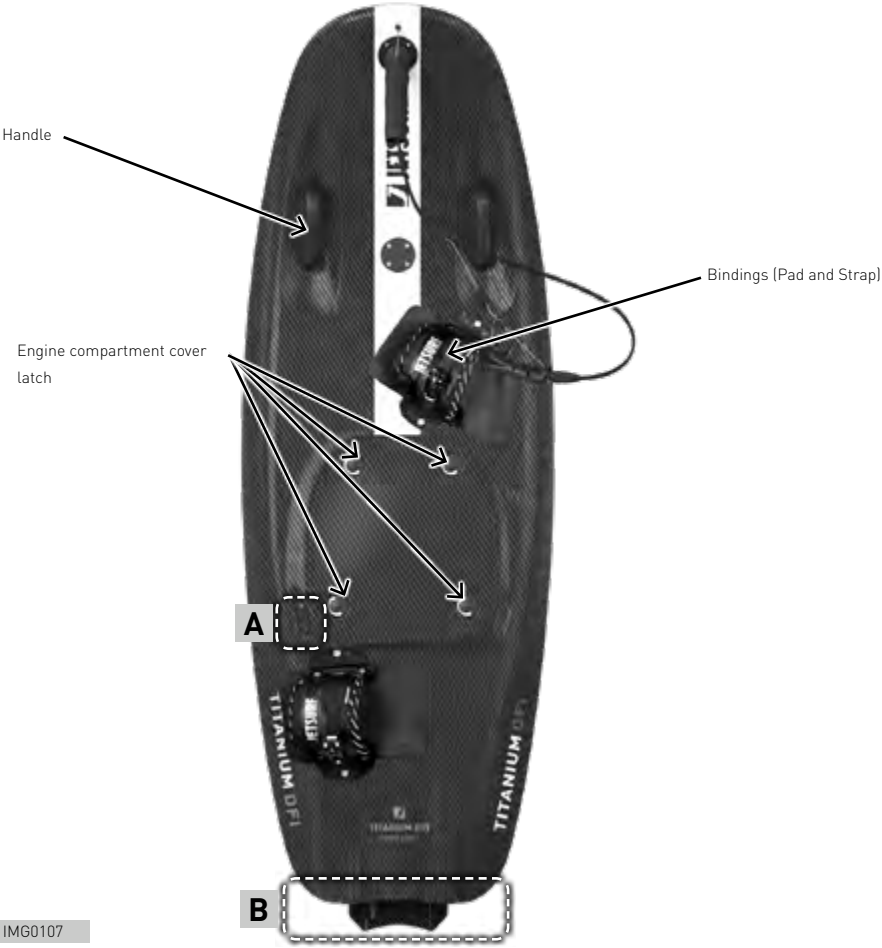
IMG0093

4.6. Standard EQUIPMENT RACE DFI SKI

ITEM	CODE	QUANTITY
FCS II Performer Black Medium - Side Fin	R06Z083	2
Manual Jetsurf Petrol	-	1
Battery charger DFI 110V / 220V	POA0174	1
Tools in a case Adventure DFI	POA0161	1
Control handle safety leash	P006034	1
Stand cover	-	1
Main fin FCS plug	P015525	1
FCS II Connect GF 7" - Main Fin	R06Z082	1
Wheels for bags	A001346	1
Standard EQUIPMENT Board Bag	POP0235	1
Stand	A000359	1
Screw DIN 7991 TX M6 x 12 A4-80	P011857	12
Small Technical Certificate	P007808	1
Large Technical Certificate	P007807	1
Main fin base protection	POP0234	1
Travel case for fins	-	1
Foam protection for the rear of the float	-	1

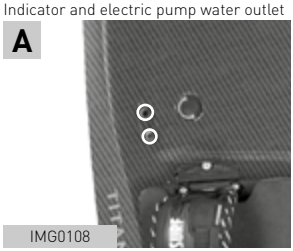
TOOLS IN THE RACE DFI SKI:		
ITEM	**CODE**	**QUANTITY**
Tool and charger case	R06Z060	1
Magnet	A000351	2
Allen screwdriver SW 4.0	P006291	1
Screwdriver ph2x100	P006292	1
O-ring 4.7 x 1.6 FPM	P012776	1
Spark plug spanner	P007806	1
NGK BPR7HS spark plug	A000353	2
DFI spark plug tester	POA0160	1
Throttle stop	A000200	1
Cleaning the cooling system	A002091	1

4.7. DESCRIPTION OF THE JETSURF TITANIUM DFI SL



IMG0107

Indicator and electric pump water outlet



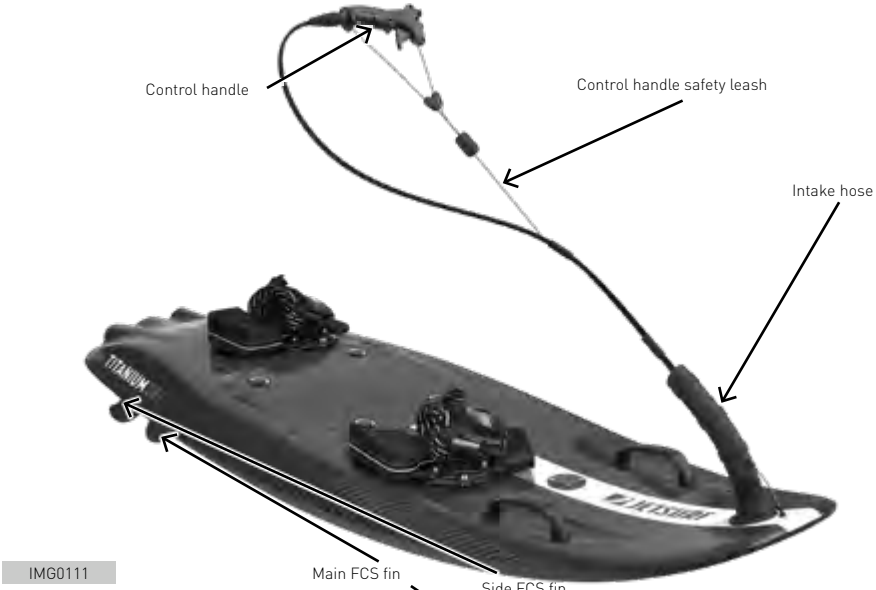
IMG0108

Exhaust tip / silencer / ECA

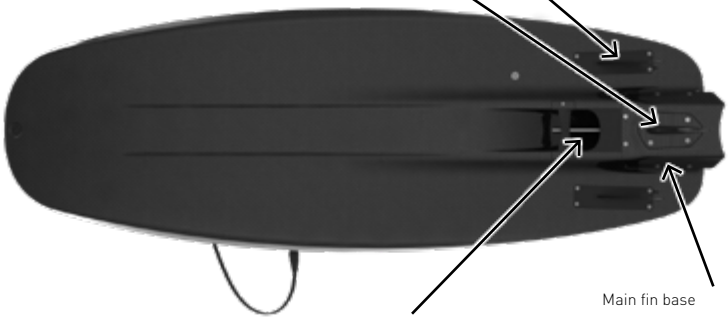


IMG0109

SURFBOARD OVERVIEW



IMG0111



IMG0088

Main fin base



IMG0003

Main fin FCS plug



IMG0068

Main FCS fin



IMG0067

Side FCS fin



IMG0026

FCS Fins ADJUSTER PLUG

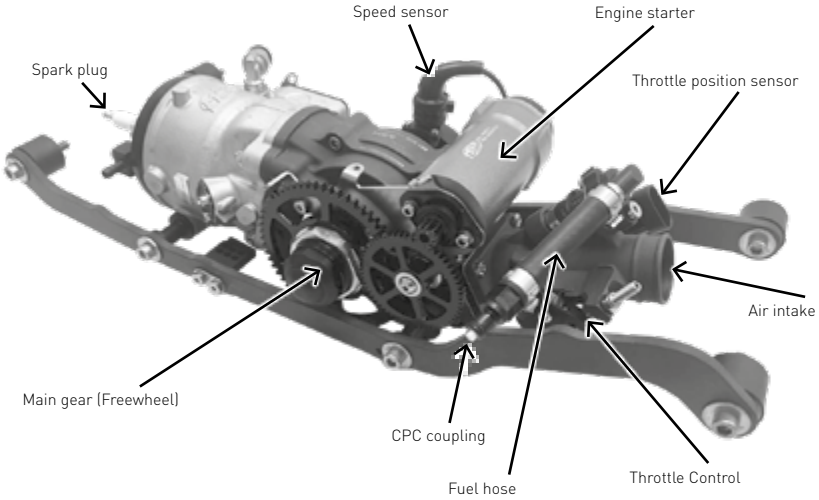


IMG0152

Tunnel wing of a jet pump



IMG0162



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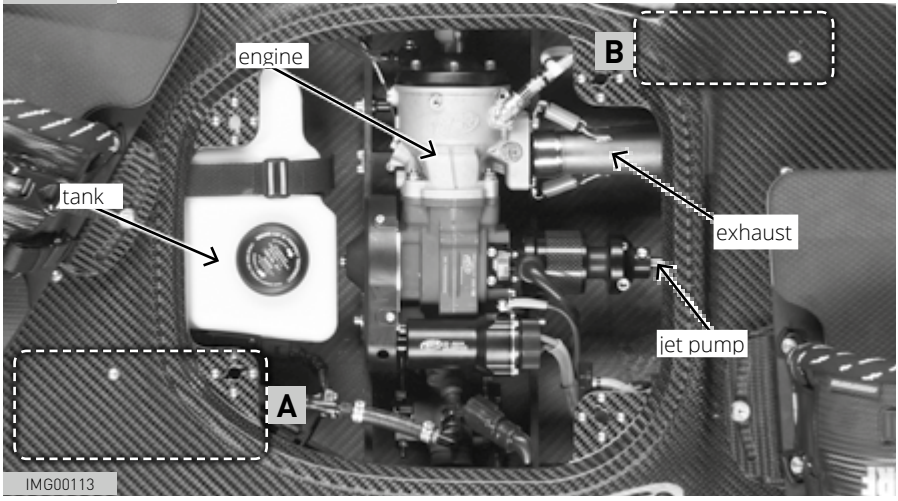


IMG00113

ICU **A**



IMG0092

Ignition coil DFI **B**



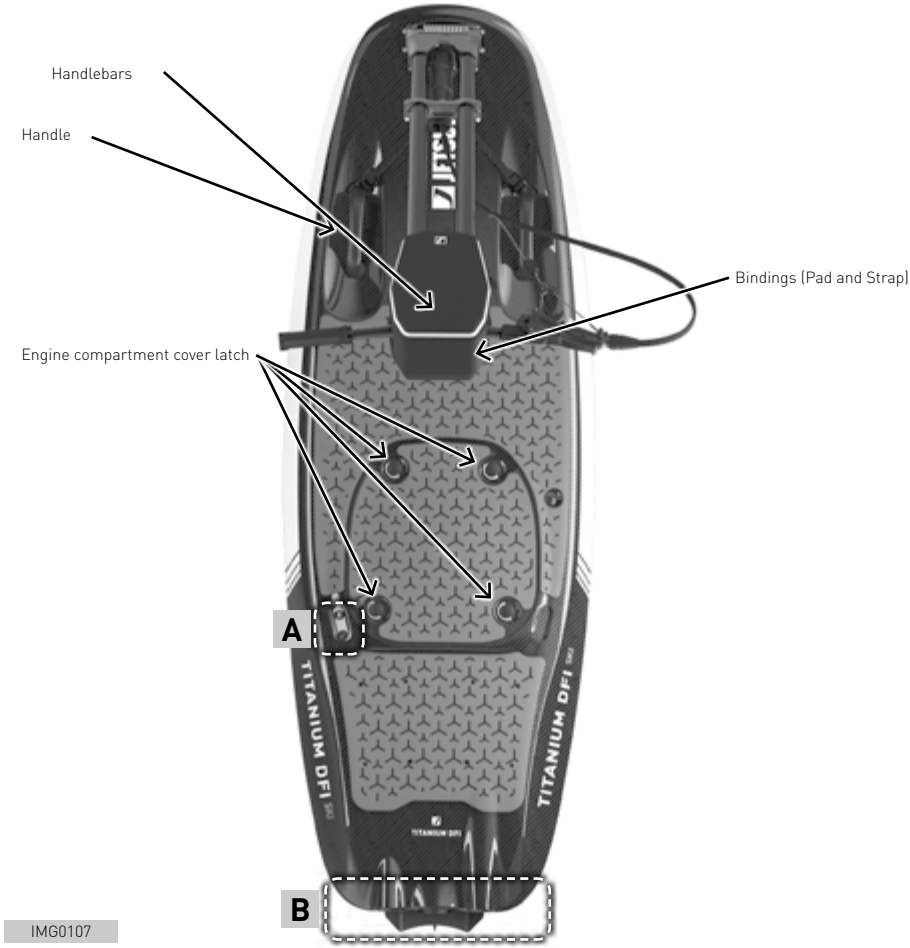
IMG0093

4.8. Standard EQUIPMENT TITANIUM DFI SL

ITEM	CODE	QUANTI-TY
FCS II Power Twin JS PG Retail Fins	R06Z085	2
Manual Jetsurf Petrol	-	1
Battery charger DFI 110V / 220V	POA0174	1
Tools in a case Adventure DFI	POA0161	1
Control handle safety leash	P006034	1
Stand cover	-	1
Main fin L200	P004463	1
Wheels for bags	A001346	1
Standard EQUIPMENT Board Bag	POP0235	1
Stand	A000359	1
Screw DIN 7991 TX M6 x 12 A4-80	P011857	12
Small Technical Certificate	P007808	1
Large Technical Certificate	P007807	1
Main fin base protection	POP0234	1
Travel case for fins	-	1
Foam protection for the rear of the float	-	1

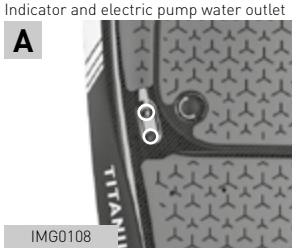
TOOLS IN THE TITANIUM DFI SL:		
ITEM	**CODE**	**QUANTITY**
Tool and charger case	R06Z060	1
Magnet	A000351	2
Allen screwdriver SW 4.0	P006291	1
Screwdriver ph2x100	P006292	1
O-ring 4.7 x 1.6 FPM	P012776	1
Spark plug spanner	P007806	1
NGK BPR7HS spark plug	A000353	2
DFI spark plug tester	POA0160	1
Throttle stop	A000200	1
Cleaning the cooling system	A002091	1

4.9. DESCRIPTION OF THE JETSURF TITANIUM DFI SKI



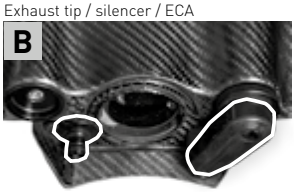
IMG0107

Indicator and electric pump water outlet



IMG0108

Exhaust tip / silencer / ECA



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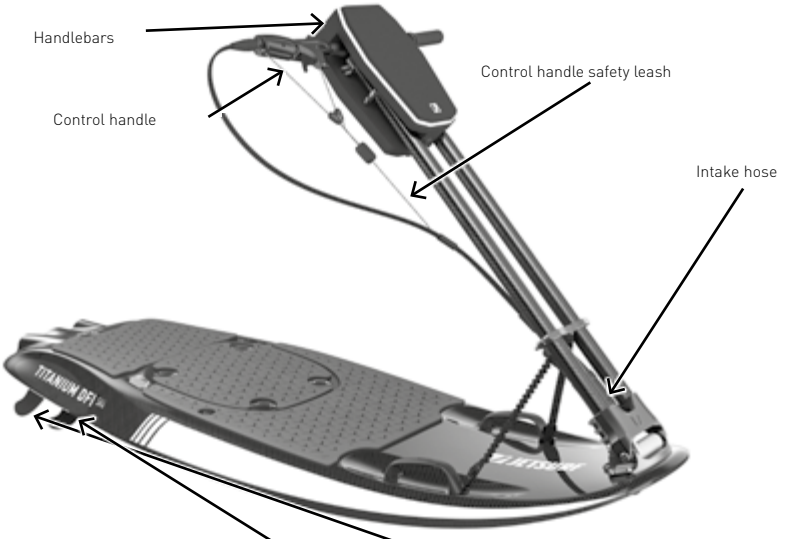

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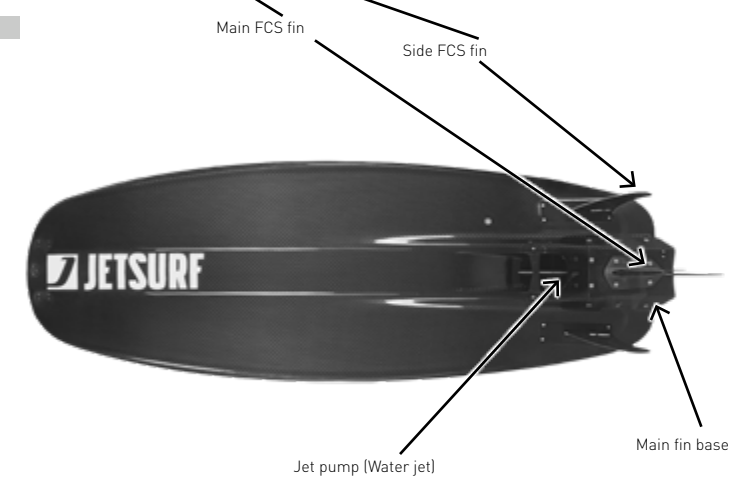


IMG0088

Main fin base



IMG0003

Main fin FCS plug



IMG0068

Main FCS fin



IMG0067

Side FCS fin



IMG0026

FCS Fins
ADJUSTER PLUG

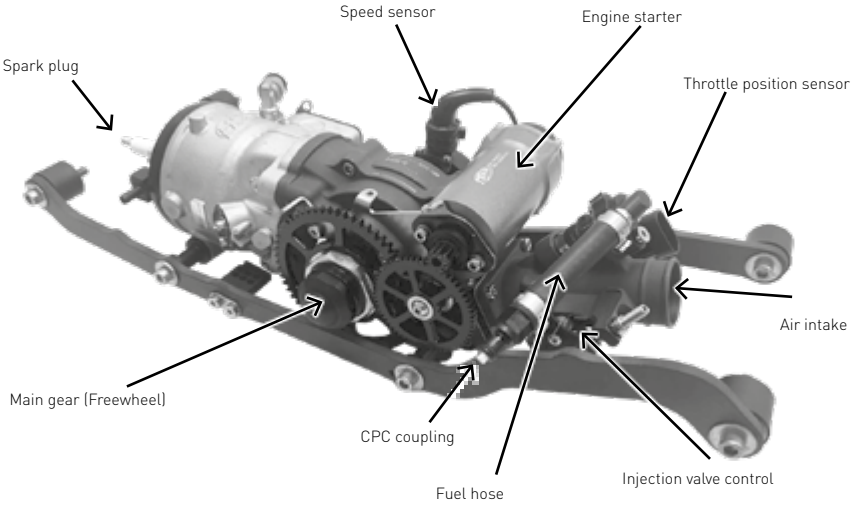


IMG0152

Tunnel wing
of a jet pump



IMG0162



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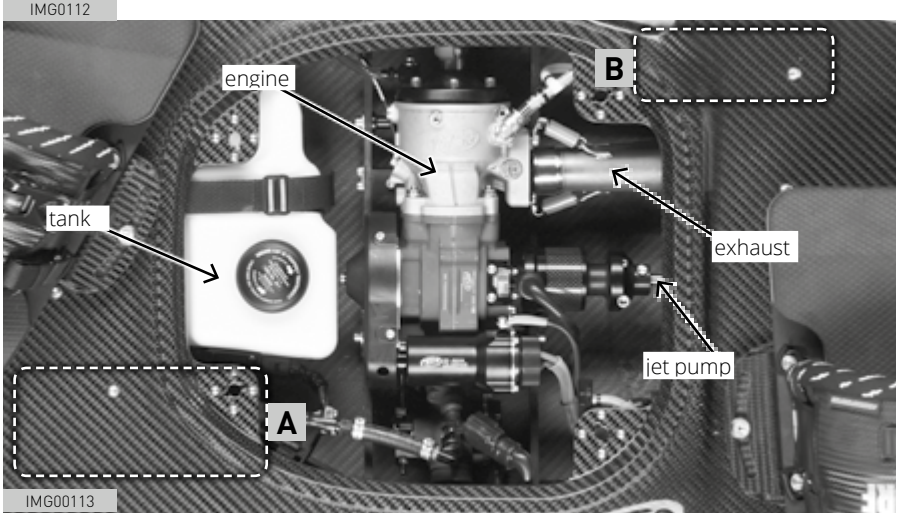


IMG00113

ICU **A**



IMG0092

Ignition coil DFI **B**



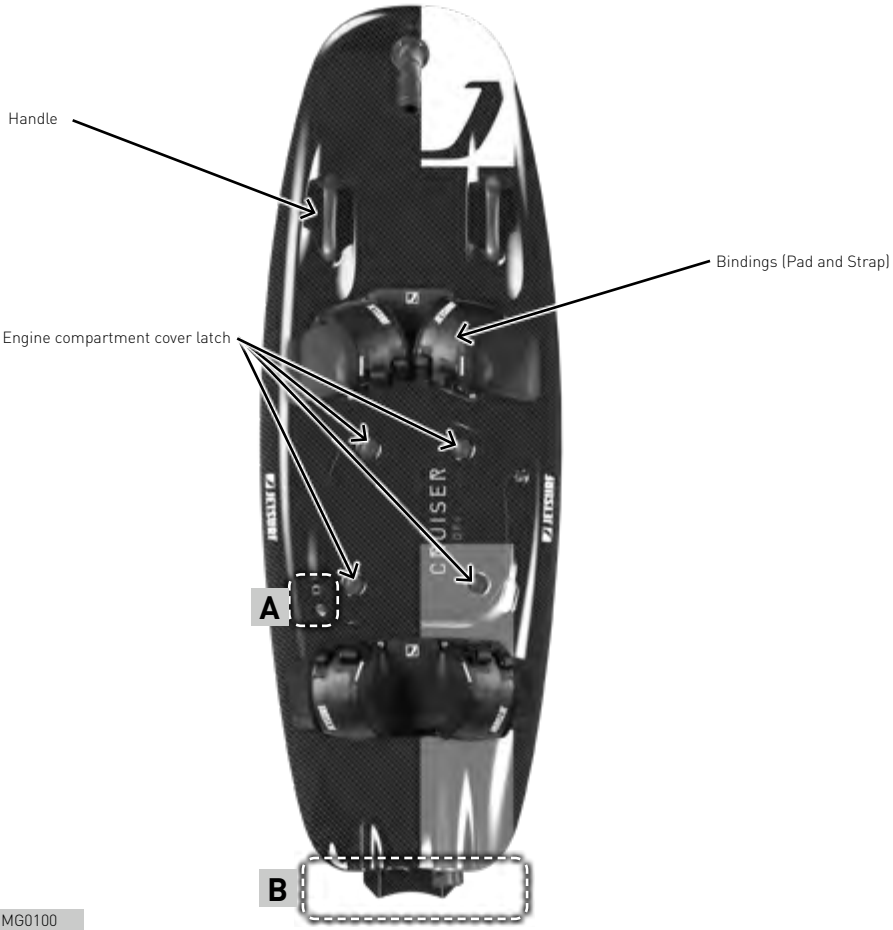
IMG0093

4.10. Standard EQUIPMENT TITANIUM DFI SKI

ITEM	CODE	QUANTITY
FCS II Power Twin JS PG Retail Fins	R06Z085	2
Manual Jetsurf Petrol	-	1
Battery charger DFI 110V / 220V	POA0174	1
Tools in a case Adventure DFI	POA0161	1
Control handle safety leash	P006034	1
Stand cover	-	1
Main fin L200	P004463	1
Wheels for bags	A001346	1
Standard EQUIPMENT Board Bag	POP0235	1
Stand	A000359	1
Screw DIN 7991 TX M6 x 12 A4-80	P011857	12
Small Technical Certificate	P007808	1
Large Technical Certificate	P007807	1
Main fin base protection	POP0234	1
Travel case for fins	-	1
Foam protection for the rear of the float	-	1

TOOLS IN THE TITANIUM DFI SKI:		
ITEM	**CODE**	**QUANTITY**
Tool and charger case	R06Z060	1
Magnet	A000351	2
Allen screwdriver SW 4.0	P006291	1
Screwdriver ph2x100	P006292	1
O-ring 4.7 x 1.6 FPM	P012776	1
Spark plug spanner	P007806	1
NGK BPR7HS spark plug	A000353	2
DFI spark plug tester	POA0160	1
Throttle stop	A000200	1
Cleaning the cooling system	A002091	1

4.11. DESCRIPTION OF THE JETSURF CRUISER DFI



IMG0100

Indicator and electric pump water outlet



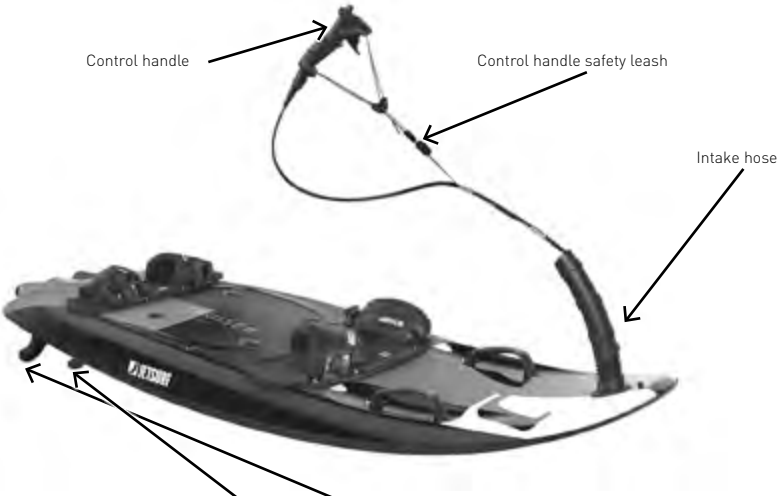
IMG0101

Exhaust tip / silencer / ECA



IMG0102

SURFBOARD OVERVIEW



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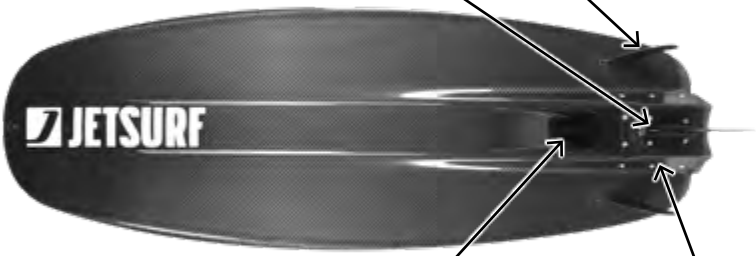
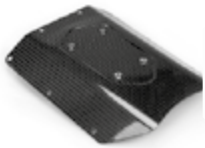


IMG0088

Main fin base



IMG0003

Main fin FCS plug



IMG0068

Main FCS fin



IMG0067

Side FCS fin

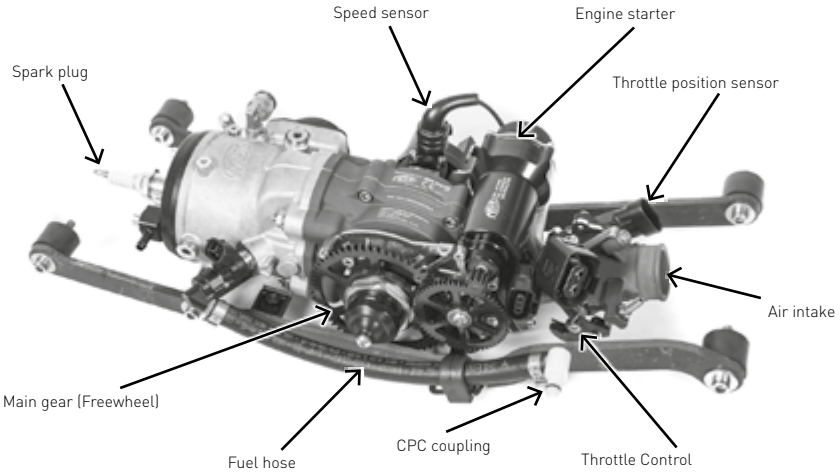


IMG0026

FCS Fins ADJUSTER PLUG



IMG0152



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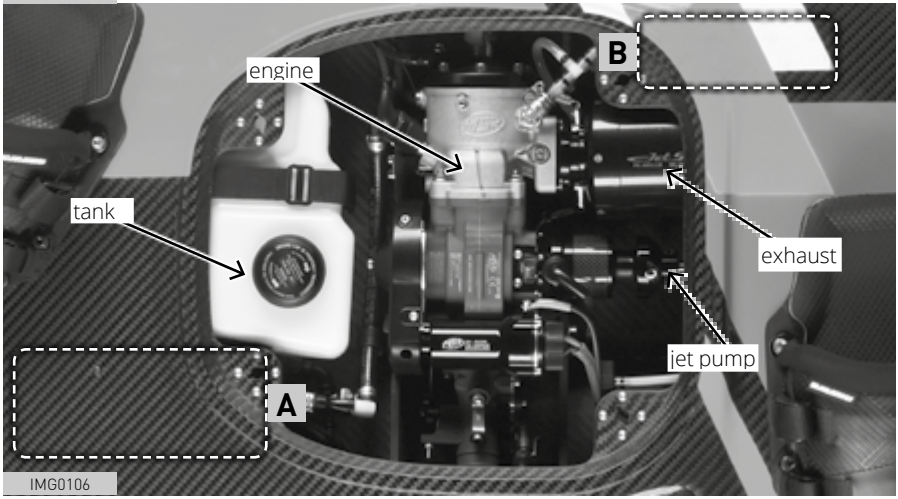


IMG0106

ICU **A**



IMG0092

Ignition coil DFI **B**



IMG0093

4.12. Standard EQUIPMENT CRUISER DFI

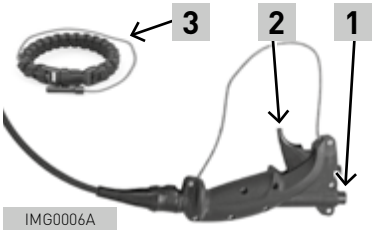
ITEM	CODE	QUANTITY
FCS II Performer Black Medium - Side Fin	R06Z083	2
Manual Jetsurf Petrol	-	1
Battery charger DFI 110V / 220V	POA0174	1
Tools in a case Adventure DFI	POA0161	1
Control handle safety leash	P006034	1
Stand cover	-	1
Main fin FCS plug	P015525	1
FCS II Connect GF 7" - Main Fin	R06Z082	1
Wheels for bags	A001346	1
Standard EQUIPMENT Board Bag	POP0235	1
Stand	A000359	1
Screw DIN 7991 TX M6 x 12 A4-80	P011857	12
Small Technical Certificate	P007808	1
Large Technical Certificate	P007807	1
Main fin base protection	POP0234	1
Travel case for fins	-	1
Foam protection for the rear of the float	-	1

TOOLS IN THE CRUISER DFI:		
ITEM	**CODE**	**QUANTITY**
Tool and charger case	R06Z060	1
Magnet	A000351	2
Allen screwdriver SW 4.0	P006291	1
Screwdriver ph2x100	P006292	1
O-ring 4.7 x 1.6 FPM	P012776	1
Spark plug spanner	P007806	1
NGK BPR7HS spark plug	A000353	2
DFI spark plug tester	POA0160	1
Throttle stop	A000200	1
Cleaning the cooling system	A002091	1

5.1. CONTROL HANDLE

The Jetsurf comes with a control handle used to control the engine speed. Supplied together with the handle is also a magnetic start key with a paracord wristband, which is used to activate and start the surfboard.

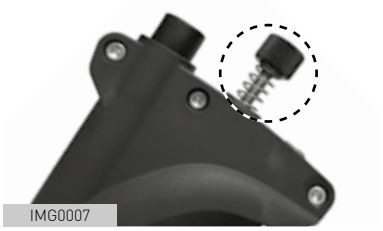
Warning (Risk of injury)
During operation the magnet must be attached around the rider's wrist. If the rider falls off the motosurf, the key is pulled out of the ignition socket and automatically switches off the engine.



IMG0006A

1 - Ignition socket
2 - Throttle lever
3 - Magnet with paracord wristband

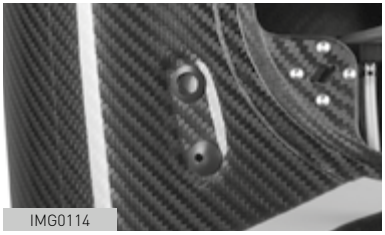
Note
The throttle lever is located on the handle, at the end of the throttle cable. Jetsurf recommends operating the throttle with your index finger. Pressing the lever increases power, releasing the lever reduces power.


IMG0007

- The Jetsurf comes with a throttle stop that can be screwed into the control handle. The screwed-in throttle stop reduces the maximum possible travel of the throttle lever, and thus reduces the maximum power. The throttle stop is suitable for beginners.

5.2. INDICATOR

The Jetsurf is fitted with an indicator that signals all the states of the motosurf whose signalling is necessary for the safe operation of this device. The indicator **(A)** has the following functions:


IMG0114

Signalling:
- Signals the states and errors of the ICU control unit

Control:
- Briefly holding the start key against the indicator deactivates the Jetsurf electronics
- Holding the start key against the indicator for a long time begins the engine maintenance phase
- Adjustment of the injection valve

5.3. CONTROL UNIT STATUS SIGNALLING

INDICATOR COLOUR	JETSURF STATE	SIGNALLED STATE
Red	After the start key is inserted into the control handle for the first time.	Activation of the Jetsurf electronics.
Yellow	After the start key is inserted into the control handle for the first time.	The Jetsurf electronics are active.
Flashing yellow	After the start key is pulled out of the control handle for the first time.	The Jetsurf is ready to start the engine (standby phase).
Green	After the start key is inserted into the control handle for the second time.	The Jetsurf starts the engine (active phase).
Fast flashing white	After holding the start key against the indicator.	Deactivation of the Jetsurf electronics / activation of engine maintenance.

5.4. IGNITION BATTERY

Flashing red	While riding	The battery is almost flat – you need to reach a safe place immediately and charge the battery.
Purple	After 25 minutes of operation, the indicator colour changes from green to purple.	"After the ICU unit is switched on and the engine is subsequently started, a timer is activated that informs the user of the JETSURF operating time from the first start after the ICU was switched on. The indicator resets back to green once the ICU unit is completely switched off and switched on again."

Petrol Jetsurf models do not have a continuous battery state indicator. It is therefore necessary to remember roughly how long the motorised board has been in operation since it was last charged. A fully charged battery lasts approximately 2 - 4 tanks (depending on riding style). However, MSR Engines recommends always charging the batteries when you return to land, to avoid an unplanned stranding on the water.

If your Jetsurf is fitted with a charging system (alternator), you will find more detailed information in chapter 6.7.

5.5. THROTTLE POSITION ADJUSTMENT

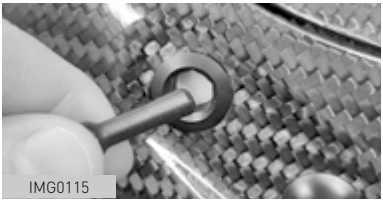
To carry out the adjustment you need **two magnets.**

Warning: The adjustment is carried out when the JETSURF electronics are **switched off.**


IMG0000

Procedure:

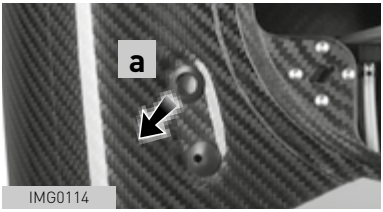
1. Insert the first magnet into the handle to activate the JETSURF (do not start the engine).


IMG0115

2. Hold the second magnet against the indicator on the float.

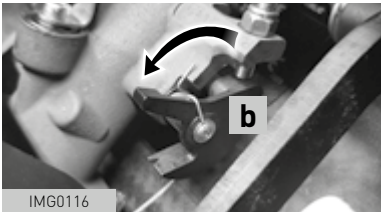

IMG00AF

3. On the handle, press the throttle lever fully and hold it.
   - The light on the indicator will light up light blue.



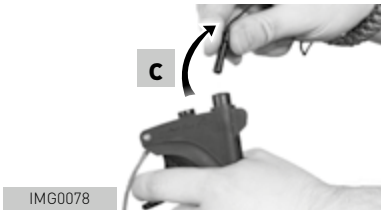
IMG0114

4. Wait until the light on the indicator changes colour to dark blue.
5. After the colour on the indicator changes, carry out the following steps:
   a. Remove the second magnet from the indicator.



IMG0116

b. Release the throttle lever.



IMG0078

c. Remove the first magnet from the handle.



Warning (Material damage)
Only carry out throttle valve adjustment if you are instructed to do so by a trained Jetsurf technician - e.g. when changing the ignition unit or injector.

5.6. CONTROL UNIT ERROR SIGNALLING

INDICATOR COLOUR	SIGNALLED ERROR
1x long red, 1x short red	Start key signal error
1x long red, 2x short red	Low battery capacity error
1x long red, 3x short red	Electric pump error
1x long red, 4x short red	Frequent starting error
Long flashing red	Ignition inactivity error

5.7. ENGINE MAINTENANCE

Engine maintenance is carried out using the start key. If the board is completely switched off, or in the standby phase, hold the magnet against the indicator. The board receives a signal to start the starter but at the same time does not receive a signal to fire the spark plug - the board therefore does not start, but cranks the engine until the magnet is removed from the indicator.

Engine maintenance can be used if the engine is flooded (see chapter 12.5.).



Warning (Material damage)
Turn the starter for less than 10 seconds and, with repeated use, check the temperature of the starter by touch to prevent it from overheating.

5.8. CONTROL UNIT ERROR EVALUATION

- **1x long red, 1x short red - Start key signal error**

  The error occurs when the magnet is left in the control handle for more than 30 seconds after the Jetsurf electronics are activated. To clear the error, pull the magnet out of the control handle.

- **1x long red, 2x short red - Low battery capacity error**

  The most common reason for this error is a very low battery capacity - the battery is not able to start the Jetsurf at this moment. Charge the battery to clear this error.

  This error may also occur if the battery is damaged (short-circuited), or if the engine starter is damaged (the starter's electric motor is unable to spin the engine even when the battery is fully charged).

- **1x long red, 3x short red - Electric pump error**

  The error appears if the electric pump is damaged or short-circuited. The ignition unit will continue to function, but the electric pump needs to be checked. Check whether the electric pump is clogged with debris, or whether the wiring harness leading from the electric pump is broken.

- **1x long red, 4x short red - Frequent starting error**

  To protect against overheating of the engine starter, this error prevents the user from starting again. This error occurs if the engine starter makes at least ten unsuccessful start attempts. The error disappears automatically after two minutes.

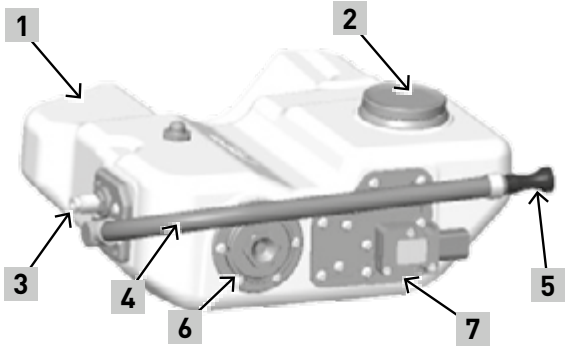
  We do not recommend continuing to start the engine without checking the engine compartment and checking whether water has got into the engine.

- **Long flashing red - Ignition inactivity error**

  This error merely indicates that the Jetsurf has been inactive (in the standby phase) for five minutes. After the error is displayed, the ignition unit automatically deactivates the electronics and switches off the Jetsurf.

6.1. FUEL AND CHARGING

The fuel system consists of:

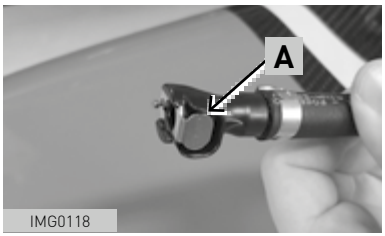


IMG0117

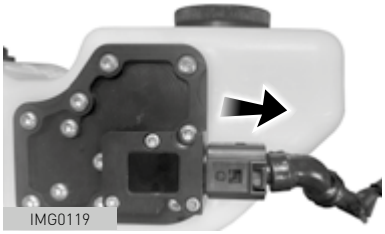
1 - Fuel tank
2 - Fuel tank cap
3 - Fuel tank breather valve
4 - Fuel hose
5 - CPC quick coupling
6 - Fuel filter
7 - Fuel pump module

The Jetsurf is also fitted with a breather hose running from the fuel tank to the intake hose at the front of the board.

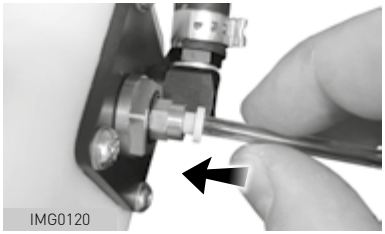
REMOVING THE FUEL TANK



1 - Disconnect the CPC quick coupling joining the hose between the fuel tank and the injector. The CPC quick coupling has a locking catch that must be pressed when disconnecting.



2 - Disconnect the fuel pump connector.
3 - Undo the hook-and-loop strap and pull the tank upwards.



4 - Disconnect the breather hose at the rear of the tank. To disconnect it, first push the hose into the fuel tank to release the catch, then pull the hose out.

Warning (Material damage)
Before every ride, make sure the fuel tank is firmly secured with the hook-and-loop strap. Slight sideways movement under gentle force is normal. During operation the tank must not come into contact with any part of the engine. Pay particular attention to maintaining a safe distance between the gear cover and the fuel tank.

6.2. FUEL

The Jetsurf runs on a mixture of petrol and oil.

Using the correct petrol-and-oil mixture is crucial to ensure the long-term use of the motorised surfboard. Using petrol with an incorrect octane rating, or oil that does not meet the specifications, may cause permanent damage to the fuel system and/or engine, which is not covered by the warranty.

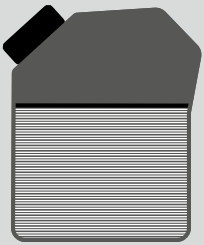
Only use containers intended for the purpose when mixing fuel. Such fuel containers must have D.O.T.* or CE approval - this is indicated on the container.

Recommended fuel: Use unleaded automotive petrol with a minimum octane rating of 95 (RON) or higher, with a maximum ethanol content of E10 (10% vol.).

Recommended oil: Use TotalEnergies NEPTUNA 2T BIO-JET synthetic two-stroke engine oil.

If this oil is not available, use an alternative synthetic two-stroke engine oil that meets the following specifications: API TC, NMMA TC-W3, ISO-L-EGD, and JASO FD/FC.

50 : 1



PETROL : OIL
Example:

To 1 litre of petrol add 0.02 litre (20 ml) of oil.

To 2 litres of petrol add 0.04 litre (40 ml) of oil.

Warning (Risk of injury)
Never refuel a tank that is inside the Jetsurf. Always remove the fuel tank before refuelling.

* Applies to the USA.

Warning (Risk of injury)
Petrol is extremely flammable and highly explosive. Never smoke or handle an open flame within 15 metres (50 feet) of the fuelling area when refuelling. Avoid spilling petrol. Wipe up any spilled fuel immediately with a dry cloth and dispose of it properly on land. Never start the engine if you can see petrol outside the fuel tank or smell its odour, as the vapours can be more explosive than liquid fuel. Should this situation occur during operation, switch off the engine immediately and seek assistance once you reach land. Before restarting, have the engine and fuel system repaired by an authorised Jetsurf dealer.

Warning (Risk of injury)
If it is necessary to remove fuel from the fuel tank, do so in a well-ventilated area. Handling fuel or fuel vapours requires considerable care and proper procedures.

Never attempt to siphon petrol by mouth. If you swallow petrol, inhale its vapours or get petrol in your eyes, seek medical attention immediately. If petrol gets on your skin, wash the affected area with soap and water.

Store fuel only in containers intended for the purpose. Such fuel containers must have D.O.T.* or CE approval - this is indicated on the container.

If you discover obvious damage or a leak in the fuel tank or fuel system, do not run the engine and contact an authorised Jetsurf service centre. Leaking fuel can cause serious environmental damage and could be a potentially dangerous situation for people and property.

Warning (Risk of injury)

Check the fuel tank before every outing so that you have enough fuel for your planned time on the water. If there is not enough fuel in the tank, the motorised surfboard may run out of fuel and the user may become stranded far from shore. It is the user's responsibility to prevent such a situation. A low fuel level can also affect operation. Due to movement and tilting on the water, the fuel in the tank may slosh from side to side, which can result in an uneven fuel supply to the engine. Always return to shore and refuel when necessary.

On that occasion, also check for the presence of water or other contamination in the tank. Water settles at the bottom. The presence of water indicates a problem that needs to be addressed. Water in the fuel system may cause the engine to run poorly or stop altogether. Dispose of water and degraded petrol-oil mixture properly; if the cause of water entering the fuel tank is not obvious and easily remedied, contact an authorised Jetsurf service centre.

If debris is visible in the fuel tank, do not put the motorised surfboard into operation. Debris can clog the fuel system and cause the engine to stop running, leaving the user stranded far from shore. Before any further start-up, it is important to determine how the contamination got into the fuel tank.

* Applies to the USA.

Warning (Material damage)

Incorrect mixing or the use of petrol / oil other than that prescribed can lead to engine damage. This damage is not covered by the warranty. Never use cheap oils intended for garden machinery or similar mechanical equipment. Do not use synthetic oils intended for use in engines that use methanol as fuel. Do not use mixed fuel that is more than 60 days old.

6.3. REFUELLING

The fuel tank may only be filled up to below the “MAX LEVEL” marker.

An excessive amount of fuel can cause the tank's pressure equalisation to malfunction!



6.4. FUEL TANK SERVICE TASKS

Warning (Risk of injury)

Do not work with an open flame!

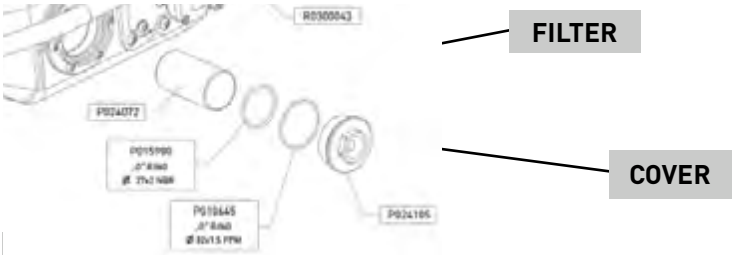
6.4.1. REPLACING THE FUEL FILTER

Replacing the fuel filter is necessary to ensure the correct functioning of the injector.

If the fuel filter becomes clogged, the injector may become clogged or damaged!

Always replace only with a new part.

1. Removing the fuel filter housing cover.
2. Replacing the fuel filter. Caution: there is fuel in the fuel filter area.
3. Checking the O-rings during reassembly.
4. Tightening the fuel filter cover to a tightening torque of 20 Nm.

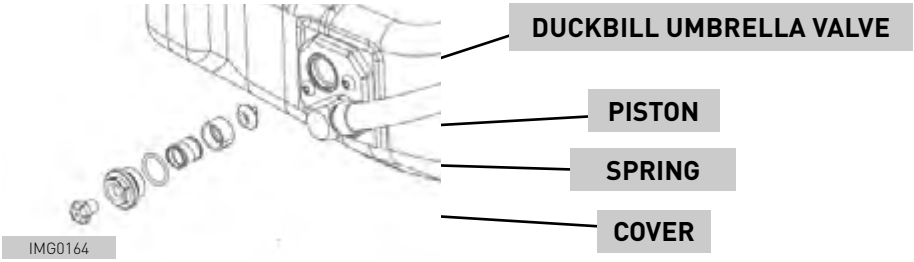


6.4.2. CHECKING THE FUEL TANK BREATHER VALVE

The breather valve must be checked and any deposits cleaned if necessary.

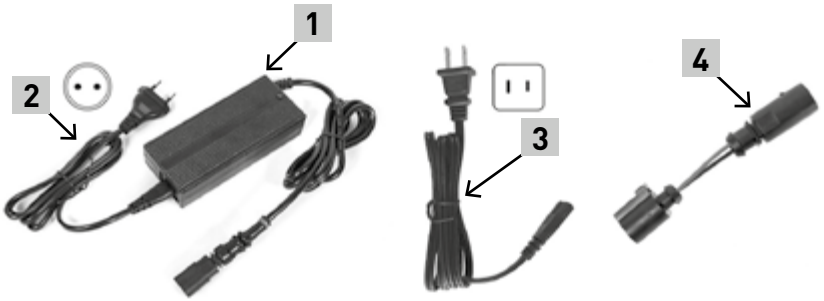
Any deposits can block or clog the valve and cause the tank's pressure equalisation to malfunction!

1. Removing the breather valve cover
2. Checking and cleaning any deposits on:
   a. The breather valve piston.
   b. The breather valve spring.
   c. The duckbill umbrella valve.
3. Checking the O-ring during reassembly.
4. Tightening the breather valve to a tightening torque of 5 Nm.



6.5. CHARGER

The charger consists of:



IMG0121

1. 12.6 V / 6 A battery charger with Jetsurf charging cable
2. 220 V power cable, type C
3. 110 V power cable, type A
4. Charger adapter (4-pin / 2-pin) - Not included in the standard package.

This charger is not suitable for charging from a car. To charge from a car, you must use the 12.6 V / 3 A battery charger with Jetsurf charging cable, which is not included in the standard Jetsurf packages. For more information, please contact your authorised Jetsurf dealer.

To use this type of charger with older models, you must use the charger adapter - 4-pin / 2-pin, which is not included in the standard Jetsurf package.

6.6. CHARGING THE BATTERY

To protect everyone nearby, as well as the person charging the battery, observe these important steps:

- Never charge the battery while the engine is running.
- Never charge the battery while the ignition control unit (ICU) is switched on.
- Never charge the battery while the engine of the motorised surfboard is in the water.
- Always wipe the charging connector dry and avoid letting water get into the charger connector.
- Never use the charger if the power cable is mechanically damaged or corroded.
- Never use any charger other than the one supplied with the motorised surfboard.
- Always reconnect the connector to the dried charging connector cover after charging the battery.
- Do not leave the charger unattended while charging and do not expose it to direct sunlight.

Warning (Risk of injury)
The battery powers the electronic system of the motorised surfboard. Proper handling of the battery, especially when charging it, plays a key role in safe use. Follow the instructions provided regarding the use and handling of the battery. Failure to follow these instructions may result in serious injury or death.

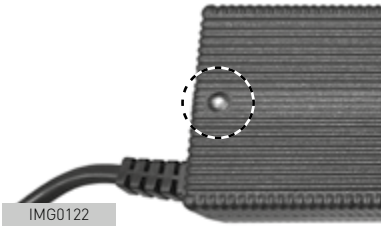
Warning (Risk of injury)
Small electrical charges and potentially sparks may form while the battery is charging. Never charge the battery in the presence of petrol or its vapours, as an electrical discharge could cause a fire or explosion, which could result in serious injury or death.

Always make sure the battery is fully charged before riding.

1 - Charger

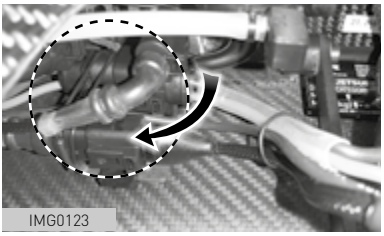


IMG0000



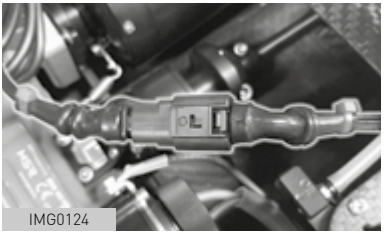
IMG0122

1 - Connect the charger's power cable to the mains. Once the charger is ready, the green LED on the charger will light up.



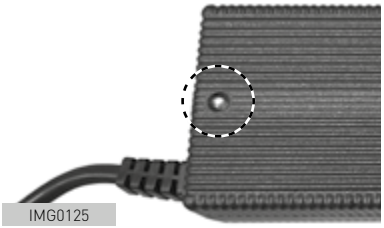
IMG0123

2 - Disconnect the charging connector from the charging connector cover in the board.

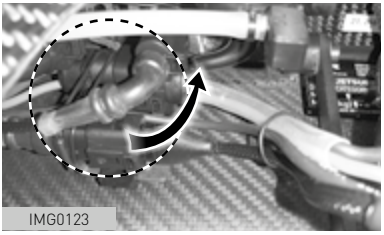


IMG0124

3 - Connect the charging cable to the charging connector in the board. Both ends of the charging cables are marked with a red cable tie.


IMG0125

4 - While charging, the LED on the charger will flash red.


IMG0123

5 - Once the battery is fully charged, the LED on the charger will light green.
6 - After charging the battery, disconnect the charger from the charging connector in the board and then unplug the charger from the mains.
7 - Remember to reconnect the charging connector in the board to the charging connector cover.

Note
We recommend charging the battery regularly, for example during a break between rides. Repeated short charging cycles do not change the life of the bat tery.

6.7. ALTERNATOR


IMG0126

1. Some Jetsurf models are fitted with an alternator. Under normal operation the alternator is able to fully recharge the Jetsurf batteries.
2. If the board is started more frequently - for example when a rider is learning on the board or falls off it often - the alternator may not be able to fully charge the Jetsurf batteries. For these cases we recommend that all riders do not rely on the alternator alone and check the state of charge using the charger or the battery state indicator (POP1855) before and after riding - just as with boards that do not have an alternator.
3. The alternator needs to be lubricated (see chapter 7).

7 ROUTINE MAINTENANCE TABLE

For information on the recommended replacement intervals for rotating components (e.g. bearings, oil seals, shafts) and engine parts (e.g. piston, piston rings and cylinder), contact JETSURF technical support.

Item	Operation	Before every ride	After every ride	Every 10 MTH / 2 months	Every 50 MTH / 6 months	Every 100 MTH / 1 year
FLOAT AND ENGINE COMPARTMENT						
Spark plug	**Check**  str. 74	X				
	Replace  str. 91			X*	X*	
Wiring harness	**Connection check**  str. 71	X				**Service**
Cooling system	**Connection check**  str. 73	X				**Service**
	Flush with fresh water		X			
Control handle	**Throttle cable check**  str. 75	X				
Engine compartment	**Water check**  str. 73	X	X			
	Flush with fresh wate  str. 86		X			
	Lubrication of drivetrain components  str. 86	X	X		X	
Float	**Flush with f resh water**  str. 83		X			
Screws and joints	**Tightness check**				X	
Engine compartment cover latches	**Check**				X	
	Lubrication				X	
Alternator (on models with an alternator)	**Lubricate**  str. 88		X			
Control handle	**Lubricate**		X			

*If the JETSURF is operated in salt water, replacement of the spark plug is recommended every 10 MTH / after 2 months of operation. When operated in fresh water, replacement of the spark plug is recommended every 50 MTH / after 6 months.

Service and inspection tasks are set as standard according to the number of engine hours (hereinafter MTH). If the user is unable to determine the current MTH reading, the interval for carrying out these tasks is determined according to the elapsed period of time.

Item	Operation	Before every ride	After every ride	Every 10 MTH / 2 months	Every 50 MTH / 6 months	Every 100 MTH / 1 rok
DRIVE SYSTEM						
Water jet	Check  str. 74	X	X			
Central drive shaft bearing	Lubrication  str. 88		X			
Water jet	Flush with fresh water		X		Service	
BATTERY						
Battery	Check kapacity  str. 71	X				
	Charging  str. 59	X	X	X		
INDIVIDUAL COMPONENTS						
Electric pump	Check  str. 89		X			
	Cleaning  str. 95			X		
Silencer / exhaust tip	Check  str. 72	X				
	Cleaning  str. 95		X			
Alternator	Lubrication		X			
PREVENTIVE INSPECTION AT THE SERVICE CENTRE						
Jetsurf board	Check				X	
	Service					X
TANK						
Fuel filter	Check			X		
	Replace				X	
Fuel tank breather valve	Check			X		
	Cleaning			X		

Warning (Risk of accident)
Before attempting your first ride without the supervision of an authorised dealer or Jetsurf instructor, make sure you have read and understood the manual supplied with the Jetsurf.

Familiarise yourself with the laws applying to the waters where the motosurf will be used.

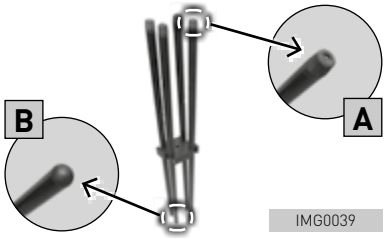
8.1. QUICK CHECKLIST OF PRE-RIDE TASKS

1 - Charge the battery.
2 - Refuel.
3 - Check the connectors of the ignition unit.
4 - Check the fuel tank hose connections.
5 - Check the cooling system hose connections.
6 - Check the throttle cable of the handle.
7 - Fit all the fins (1x centre fin, 2x side fin).
8 - Adjust the straps on the bindings (straps).
9 - Check that there is no water at the bottom of the engine compartment.
10 - Check that the engine compartment cover is correctly closed.
11 - Check the silencer / exhaust tip.
12 - Check that the water jet blades are clean.

8.2. STAND

Note
Every Jetsurf comes with a lightweight stand. Using the stand is recommended to keep the motorised surfboard off the ground and is well suited for preparation, maintenance and cleaning.

SETTING UP THE STAND



- Line up the poles. Rubber up **(A)**, plastic down **(B)**.



IMG0073

- Gently turn the lower part of the stand anticlockwise.



IMG0074

- Pull the opposite ends of the two poles on the upper part apart from each other. The stand will open out.

Warning (Material damage)
Before placing the Jetsurf on the stand, make sure all the stand's legs are touching the ground, are on firm footing and the stand does not tip over.

After placing the board on the stand, make sure the board rests stably on all the legs of the stand.

8.3. SIDE FINS

Every Jetsurf comes with two side fins.

FITTING THE FCS SIDE FIN



IMG0042

- Insert the fin into the cassette and position the front tab of the fin into the front slot so that the hook in the tab catches on the horizontal bar inside the groove.



IMG0043

- Click the rear tab into the cassette so that the locking mechanism in the cassette clicks into the fin.
- Check that it is firmly secured; the fin should not move.
- Fit the second side fin in the same way.

Warning (Risk of accident)
It is strongly recommended to use all the fins at all times. This ensures maximum control over the movement of the motorised surfboard.

REMOVING THE FCS SIDE FIN



IMG0044

- To remove the fin, grasp it and pull it sharply downwards and forwards.

8.4. MAIN FIN

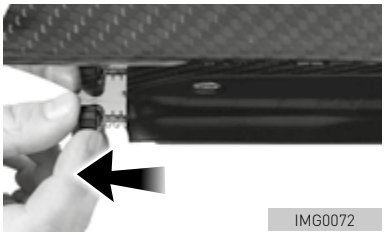
FITTING THE FCS MAIN FIN



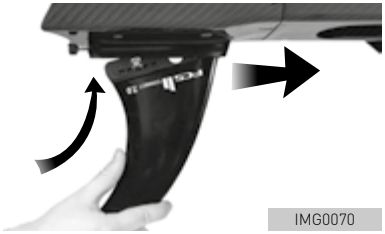
IMG0069

- Screw the centre fin flange onto the fin base using the four screws.

Note
Use the Allen key supplied with the Jetsurf.


IMG0072

- Unscrew the locking screw from the centre fin flange.


IMG0070

- Insert the fin and slide it in up to the edge.
- Lay the other side into the flange until the locking mechanism clicks into place.



IMG0071

- Check that it is firmly secured; the fin should not move.
- Screw the locking screw back into the centre fin flange.

Warning (Material damage)
Do not transport the motosurf with the fins attached. The fins are not built to bear the weight of the motosurf on a hard surface.

Keep all the fin mounting screw holes clean and free of sand and other debris.

For transport, screw the centre fin screws into the fin base (without the centre fin flange and the centre fin).

8.5. BINDINGS (STRAPS)


IMG0127

- The Jetsurf has fully adjustable bindings that can be tightened or loosened. Make sure the bindings fit comfortably and are neither too loose nor too tight.

Warning (Material damage)
Always use the screws supplied with the bindings together with the board. Using a different screw can lead to irreversible damage to the battery and bindings.

8.6. BINDING ADJUSTER

Note
The binding adjuster is optional equipment for Jetsurf motorised surfboards.

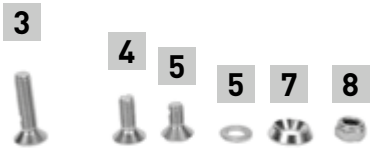
The binding adjuster is used to rotate and shift the bindings to suit the customer's needs. The binding adjuster is compatible only with two-tab bindings.

The binding adjuster contains:



IMG0079

1 - 2x Carbon binding adjuster - Upper
2 - 2x Carbon binding adjuster - Lower



IMG0076

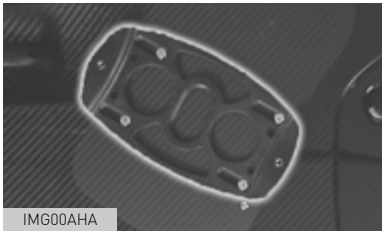
3 - 8x M6x25 screw
4 - 4x M6x16 screw
5 - 8x M6x12 screw
6 - 8x M6.4 washer
7 - 4x M6.4 washer for countersunk screw
8 - 8x M6 nut



IMG0077

9 - 1x Foam pad, front foot heel
10 - 1x Foam pad, front foot toe
11 - 1x Foam pad, rear foot heel

8.7. INSTALLING THE BINDING ADJUSTER



IMG00AHA

- Screw the carbon binding adjuster - Lower to the board using 8x M6x12 screws (4 screws per binding).
- With these screws you can adjust the bindings towards or away from the centre of the board.



IMG00AIA

- Screw the bindings to the carbon binding adjuster - Upper using 8x M6x25 screws.
- Secure each of the screws with an M6.4 washer and an M6 nut.



IMG0077

- Stick the foam pads to the underside of the bindings.



IMG00AJA

- Join the carbon adjuster - Upper and the carbon adjuster - Lower using 4x M6x16 screws and 4x M6.4 washers for countersunk screws (2x M6x16 and 2x M6.4 per binding).
- With these screws you can rotate the bindings about their axis.

Warning (Risk of injury)
After any handling of the bindings, make sure all the screws are properly tightened so that they do not come loose during the ride.

8.8. CHECKING THE BATTERY CAPACITY

Warning (Risk of injury)

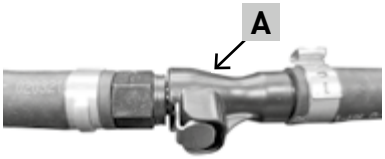
Petrol Jetsurf models do not have a continuous battery state indicator. You therefore need to remember roughly how long the motorised board has been in operation since it was last charged. A fully charged battery lasts approximately 2 - 4 tanks (depending on riding style). However, MSR Engines recommends always charging the batteries when you return to land, to avoid an unplanned stranding on the water.

If your Jetsurf is fitted with a charging system (alternator), you will find more detailed information in chapter 6.7.

8.9. CHECKING THE WIRING HARNESS CONNECTOR CONNECTIONS

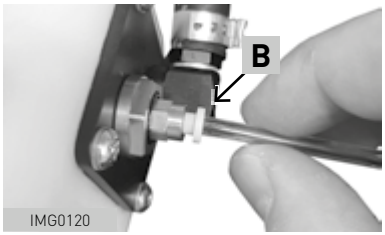
It is important that no water gets into any of the connectors, especially the connectors used during normal use of the Jetsurf - the charging connector and the fuel pump connector. As well as checking the connections, also check that the wiring is not loose inside the board and that during riding it cannot become tangled in the moving parts of the board, e.g. in the gears or the water jet shaft.

8.10. CHECKING THE FUEL TANK HOSE CONNECTIONS



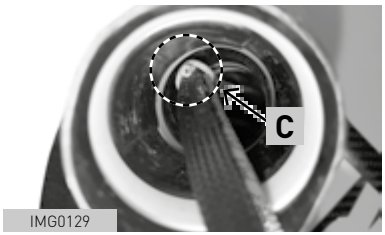
IMG0128

- Check that the fuel tank hose is correctly connected to the engine through the CPC connector **(A)**.



IMG0120

- Check that the fuel tank breather hose is correctly connected to the fuel tank **(B)**.



IMG0129

- Also visually check that the other end of the fuel tank breather hose is attached inside the intake hose at the front of the board **(C)**.

8.11. CHECKING THE SILENCER / EXHAUST TIP

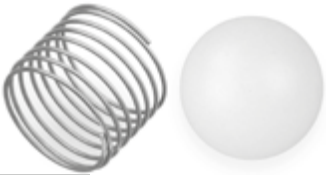
The exhaust silencer significantly reduces noise.

For it to work correctly it needs to be checked and cleaned regularly. Before every ride, make sure the silencer is correctly fitted and that the exhaust ball or spring cannot fall out during riding.



IMG0130

- Loosen the nut and remove the silencer from the exhaust.
- Remove the exhaust spring and ball.



IMG0131

- Thoroughly clean all the removed parts.
- Put the ball, spring and silencer back, and screw on the nut.

Warning (Material damage)

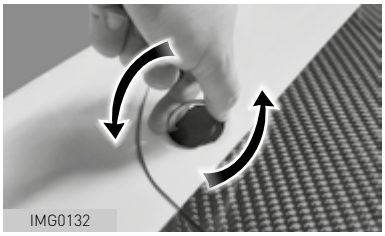
The exhaust spring is conical in shape. The spring must be fitted in the exhaust so that the smaller-diameter end of the spring sits on the exhaust ball. Otherwise this valve loses its function, which during riding can result in the exhaust and engine being flooded with water.

Note

The Jetsurf Titanium DFI comes with a silencer that is inside the board. At the end of this silencer there is also a ball-and-spring mechanism that must be checked and cleaned regularly.

8.12. CHECKING FOR WATER IN THE ENGINE COMPARTMENT

Warning (Risk of injury)
Before checking the engine compartment, always make sure the board is not running and the electronics are completely switched off. This will prevent possible injury.


IMG0132

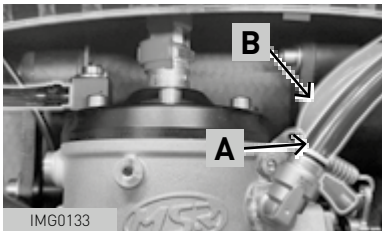
- Unlock the engine compartment cover latches (x4).
- Check that there is no water at the bottom of the engine compartment.

Warning (Material damage)
Never begin a ride if there is a larger amount of water (1-2 cm) at the bottom of the engine compartment, and contact an authorised service centre as soon as possible.

A small amount of water can get into the engine compartment through the air vents required for the engine to run, or during a fall. The electric pump can, however, pump out such an amount of water.

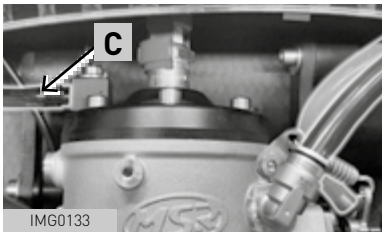
8.13. CHECKING THE CLEANLINESS AND CONNECTION OF THE COOLING SYSTEM

During riding it is very important that the heat produced by the engine is carried away well and that the individual components do not overheat.



IMG0133

- Check the cooling system inlets **(A)** - engine cooling and **(B)** - exhaust cooling. Some models may have several hoses for cooling the exhaust or the alternator.

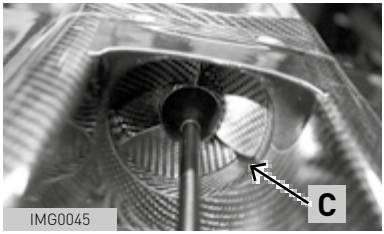


IMG0133

- Check the cooling system outlet **(C)**.

Warning (Material damage)
If the cooling system inlet / outlet are not clean, they must be cleaned and the whole cooling system flushed with fresh water.

8.14. CHECKING THE WATER JET

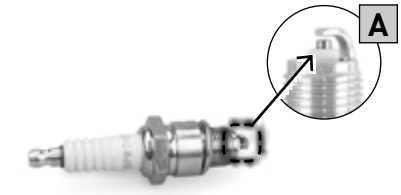


IMG0045

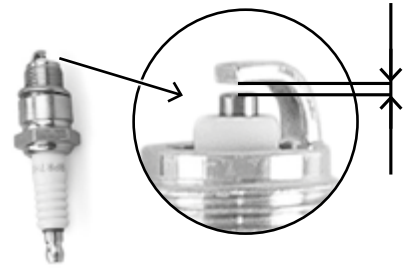
- Before riding, check the cleanliness and condition of the water jet blades **(C)**. Their condition can result in reduced performance of the motorised board.

Warning (Risk of injury)
Under no circumstances put your fingers or any objects into the water jet unless you are absolutely certain that the motorised board is switched off and cannot be started.

8.15. CHECKING THE SPARK PLUG



- You can visually inspect the spark plug after unscrewing it. If the electrode (A) is significantly worn, or if you can see scoring or cracks on it, replace the spark plug.



IMG0134

- Permitted gap between the spark plug electrodes: 0.6-0.7 mm.

Warning (Risk of injury)
Never remove the spark plug boot while the ignition is on (the indicator is neither lit nor flashing).

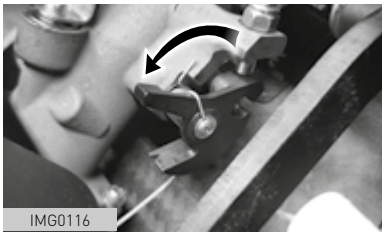
Do not remove the boot from the spark plug if there is water in the engine compartment.

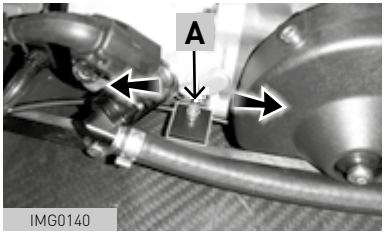
When working in the engine compartment, handling a flame is prohibited.

Remove the fuel tank before every assembly. This prevents possible ignition of fuel and vapours.

After removing the boot from the spark plug, never start the engine - starting the engine without the spark plug boot fitted can destroy the ignition.

8.16. CHECKING THE THROTTLE CABLE OF THE CONTROL HANDLE


IMG0116



IMG0140

- Make sure the throttle cable fully opens the injection valve (when the throttle of the control handle is fully pressed) and closes it (when the throttle of the control handle is released).
- If the valve does not open fully at maximum pressure on the throttle lever of the control handle, loosen the screw holding the throttle cable on the engine **(A)** and slide the throttle cable away from the injection valve.
- If the valve does not close completely when the throttle lever of the control handle is released, loosen the screw holding the throttle cable on the engine **(A)** and slide the throttle cable towards the injection valve.
- After adjusting the throttle cable, remember to retighten the screw holding the throttle cable **(A)**.

9 RIDING

9.1. SWITCHING ON THE CONTROL UNIT AND STARTING THE ENGINE



Warning (Risk of injury)
Keep your hands, feet and all body parts away from the intakes of all jets while the engine is running. Serious injury or death may result.

When setting off on the Jetsurf, make sure that people (especially children) are at least 10 metres (33 feet) away from the water jet.

It is essential that the rider releases the control handle when losing full control or balance during a ride. Pulling the start key out of the ignition socket stops the engine immediately. Failure to pull the start key out of the ignition socket may result in serious injury or death.

Never use the motosurf in swimming areas.



Warning (Material damage)
Do not leave the Jetsurf in direct sunlight or where its surface temperature can rise above 65 °C (149 °F). A rise in temperature can damage the Jetsurf.

Bear in mind that the Jetsurf is neither intended nor designed as a flotation aid. Do not leave the motorised surfboard unattended or in the water with the engine off for an extended period, as it may sink.



Caution (Protective equipment)

- Throughout the ride you must wear protective equipment that ensures the safety of the rider, the vessel and other people around the vessel:
  - Helmet
  - Life jacket
  - Safety leash for the leg or arm

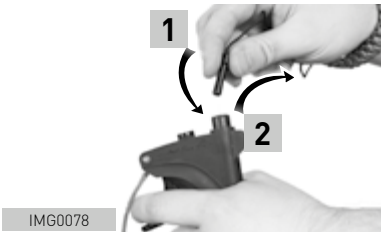


Note
Before every ride, first test the device out of the water to check that it is working.

9.2. THE JETSURF STARTING PROCESS

The starting process has two phases, Standby and Active. Read these instructions carefully so that you fully understand them.

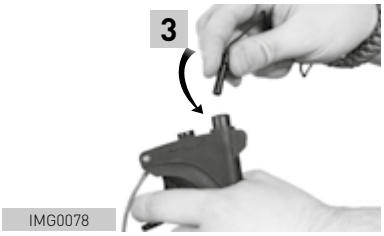
STANDBY PHASE (PHASE ONE)



IMG0078

- Insert the magnet into the ignition socket of the control handle. The board's control unit will switch on. The indicator signals this with a blue light.
- Pull the magnet out of the ignition socket. The Jetsurf is now in standby mode. In this phase the Jetsurf stays active for 5 minutes (from the last time the start key was pulled out of the ignition socket). After that the board switches off automatically and the procedure must be repeated. The indicator now signals the set engine power.

ACTIVE PHASE (PHASE TWO)



IMG0078

- When the board is in the standby phase, insert the magnet into the ignition socket. The Jetsurf moves to the active phase and the engine now begins to start. At this point you must apply throttle on the control handle, otherwise the engine will switch off due to a lack of fuel. The indicator flashes green during this phase.
- Once the start key is pulled out of the ignition socket, the Jetsurf returns to the standby phase.

Warning (Material damage)
For a deep-water start it is essential to find a suitable spot to begin riding. The water from which the Jetsurf will start must be deep enough, otherwise the fins may be damaged. The minimum depth is 50 cm. Bear in mind that after the engine accelerates and you climb onto the vessel, the rear of the board may submerge by 10-20 cm.

Also make sure you have enough room to manoeuvre, especially for beginners. The ideal area is 300 x 300 m, free of obstacles and with a calm surface. Always check whether there is debris in the water that could get into the water jet and thereby damage the Jetsurf.

9.3. STARTING FROM THE SHORE (IN SHALLOW WATER)

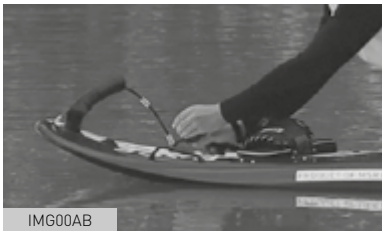
To speed up the starting process, we recommend checking the board and engine on the shore and carrying the board into the water in the standby phase, where only the second phase of the start is then performed.


IMG00AA

- The correct starting position for the rider when starting from shallow water. The rider holds their Jetsurf with both hands so that they can hold the board with their dominant hand and operate the throttle lever of the control handle at the same time.


IMG00AB

- At the start the rider stands beside the board, not lying on the board.


IMG00AB

- Once the rider is in the correct position to start, they can use their free hand - the one not holding the control handle - to insert the magnet into the ignition socket (assuming the board was in the standby phase, otherwise the whole starting process must be carried out).


IMG00AF

- After the key is inserted, the engine starts after a 3-second delay. During this moment the rider grasps the free handle and presses the throttle lever of the control handle to at least halfway.


IMG00AE

- The rider climbs onto the Jetsurf the moment the board begins to accelerate.

Note
For comfortable riding and the correct functioning of the Jetsurf, it is essential to keep the throttle lever of the control handle pressed throughout the ride. It is not necessary to maintain full speed, but at insufficient speed the vessel is unstable and harder to control.

Warning (Material damage)
Once the Jetsurf is up and running, visually check that the cooling system is working correctly. A continuous flow of water coming from the cooling system should be visible at the cooling-water outlet on the sides of the battery. If you do not see water, stop immediately and inspect the vessel.

9.4. STARTING IN DEEP WATER OR AFTER A FALL

- Starting in deep water is similar to starting from the shore.
- If, after a fall, the rider manages to insert the magnet into the ignition socket within 5 minutes, the Jetsurf moves to the active phase and the engine begins to respond to pressure on the throttle lever of the control handle.
- If the rider does not manage to insert the magnet into the ignition socket of the control handle within 5 minutes of the fall (of pulling the start key out of the ignition socket), they must repeat the whole starting process.


IMG00AG

- After starting, you need to use the power of the engine to pull yourself back onto the Jetsurf.

Warning (Risk of injury)
It is essential that the magnet is pulled out of the ignition socket of the control handle during a fall, in order to stop the Jetsurf safely; this can only happen if the rider releases the control handle when falling.

Caution
If the Jetsurf cannot be restarted after stopping on the water, we do not recommend repeating the starting procedure more than 3 times. The Jetsurf needs to be brought to shore and inspected there.

If the engine is not running, do not stay on the board.

Caution
The wristband of the engine shut-off key must be fastened securely to your arm; see 9.3, image IMG00AA.

Caution
Do not open the engine compartment cover while the Jetsurf is on the water or in use. Before every ride, always check that the cover is securely closed. Failure to do so may result in damage to engine components, serious injury or sinking

9.5. LEARNING TO CONTROL THE THROTTLE ON THE JETSURF

During the very first ride the rider should get to grips with handling the control handle and acceleration. This skill is crucial for the Jetsurf. The rider can stay in a lying or kneeling position. Only once they are confident in controlling and managing the throttle should the rider move to a standing position.

9.6. LEARNING TO TURN ON THE JETSURF

The next important step is turning. You turn by leaning your body and the whole craft to one side or the other. While turning, avoid sudden reductions in speed (releasing the throttle lever on the control handle) — the Jetsurf will tend to level out, making the turn harder and the board less stable.

9.7. LEARNING TO RIDE THE JETSURF

Caution

If you want to move into a standing position, make sure you have enough room to manoeuvre, that you are not crossing the path of any other vessel, and that there is no swimmer or obstacle near the Jetsurf. When getting up, you also need to have sufficient speed (the board is stable and runs without much resistance).

The way to move from kneeling to standing is very individual.



IMG00AC

For beginners we recommend first placing one foot into the rear binding while kneeling - the left foot if you hold the control handle in your right hand, or the right foot if you hold the control handle in your left hand.



IMG00AD

Once your foot is firmly placed in the rear binding, the rider should try in a single movement to place the front foot into the binding, let go of the Jetsurf handles and move smoothly from kneeling to standing. After letting go of the handles, you can use the control handle's safety leash to keep your balance.

While getting up you must maintain a constant speed, get up smoothly and not stop halfway.

If the rider falls while getting up, the whole procedure must be repeated. After each fall we recommend continuing for a while riding straight ahead, lying or kneeling.



Caution

The rider must keep track of their riding time. The indicator on the side of the Jetsurf signals capacity only when the battery capacity is very low. You must allow a reserve for the trip back to shore. During the return to shore the rider must also take into account potential swimmers near the shore as well as sufficient water depth.

9.8. STOPPING / FALLING ON THE JETSURF

If the rider wants to stop, they must first reduce the Jetsurf's speed before the stopping point. Once the rider is close enough to the stopping point, they pull the magnet out of the ignition socket of the control handle. The engine stops, and once the Jetsurf slows to a sufficient speed the rider can safely jump off the board.

10 AFTER RIDING

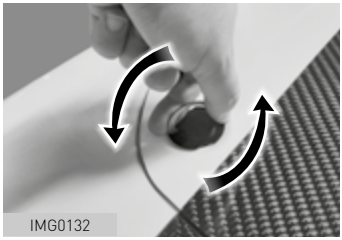
10.1. QUICK CHECKLIST OF POST-RIDE TASKS

1 - Tilt the Jetsurf nose-up and pour the residual water out of the float.
2 - Start the engine with the Jetsurf nose-up - for a maximum of 10 seconds.
3 - Wash the Jetsurf float with fresh water, including the engine compartment.
4 - Using the electric pump, remove the residual water from the engine compartment.
5 - Let the Jetsurf dry out.
6 - Lubricate the metal parts of the engine and engine compartment.
7 - Charge the battery.
8 - Store the Jetsurf with the engine compartment cover open for thorough drying.

10.2. CHECKING FOR WATER IN THE ENGINE COMPARTMENT

Warning (Risk of injury)

- Before checking the engine compartment, always make sure the board is not running and the electronics are completely switched off. This will prevent possible injury.


IMG0132

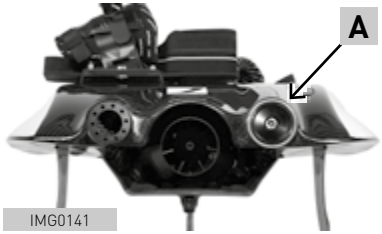
- Unlock the engine compartment cover latches (x4).
- Check that there is no water at the bottom of the engine compartment.

Warning (Material damage)

Never begin a ride if there is a larger amount of water (1-2 cm) at the bottom of the engine compartment, and contact an authorised service centre as soon as possible.

A small amount of water can get into the engine compartment through the air vents required for the engine to run, or during a fall. The electric pump can, however, pump out such an amount of water.

10.3. DRAINING WATER FROM THE FLOAT



IMG0141

- Stand the Jetsurf vertically. On the rear of the Jetsurf there are small holes through which water can drain out of the float.
- Alternatively, you can unscrew the plug **(A)** for faster draining.

10.4. RINSING THE FLOAT

When rinsing the float, take care that all parts of the board that were in contact with water are properly rinsed. Especially if the
Jetsurf was operated in salt water.
Riding in salt water leaves salt residue on the surface of the float, which can accelerate corrosion and the degradation of materials. To preserve a long service life and aesthetic appearance, we strongly recommend thorough rinsing with fresh water after every use in a marine environment, on a lake or other natural bodies of water.
The following procedure serves as a basic framework for washing the float. Then proceed to the targeted cleaning of the individual parts, which you will find later in the manual.

Basic washing of the float:



1 - Preliminary rinse with fresh water - As soon as possible after riding, rinse the whole float with clean fresh water - ideally using a low-pressure hose or a gentle shower. Focus on the entire surface of the float and all the places where salt and dirt can build up.



2 - Using a cleaning agent (optional) - In the case of heavier soiling, a pH-neutral cleaning agent intended for boats or water sports can be used.



3 - Thorough rinse - After using detergent, carefully rinse the whole float again with fresh water to remove any residue of cleaning agents.

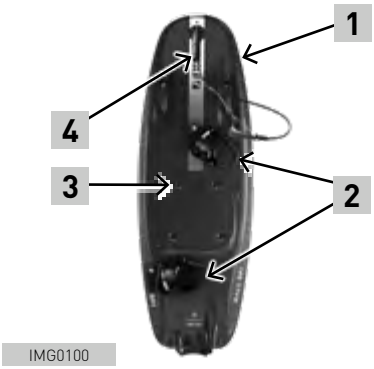


4 - Drying and inspection - After rinsing, dry the float with a microfibre cloth and carry out a visual inspection - check for dirt in hard-to-reach places and any scuffs or surface damage.

Warning (Material damage)
Do not use white spirit, acetone, solvents, industrial degreasers or other aggressive substances - there is a risk of damaging the surfaces and materials of the float.

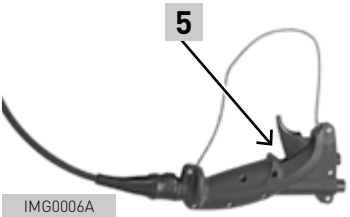
Warning
The manufacturer is not liable for any damage caused by the use of unsuitable or aggressive cleaning agents. When washing, always take a gentle approach and thoroughly rinse all treated surfaces.

Key areas of the float to clean:



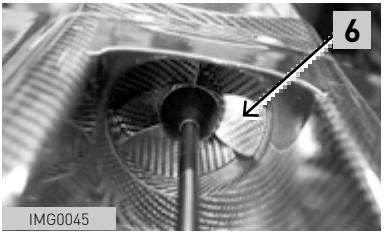
IMG0100

1 - Outer float - rinse the whole outer surface of the float. - the design may be subject to defects due to salt or contaminated water.
2 - Bindings - Rinse the bindings thoroughly on the outside and inside, including the screws and the tightening system. - The fabric part may crumble due to salt, the plastic part may perish and break, and the locking system may jam.
3 - Engine compartment cover latches - Rinse the moving parts of the engine compartment cover latches (with the cover in the locked state). - Salt and contaminated water can jam the latches.
4 - Intake port - Spray water into the intake port. Then the water must be allowed to drain out through the drainage holes as per 10.3.



IMG0006A

5 - Control handle - Rinse the moving parts of the handle. - Salt and contaminated water can jam the throttle lever.



IMG0045

6 - Water jet - rinse the moving parts of the water jet. - No dirt must remain between the water jet blades, as this could lead to the blades breaking.

10.5. FLUSHING THE ENGINE COOLING SYSTEM

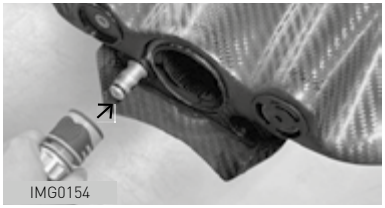
When flushing the cooling system, take care that all parts that were in contact with water are properly rinsed - especially if the JETSURF was operated in salt water.
Riding in salt water leaves salt residue on the parts of the cooling system, which can accelerate corrosion, the degradation of materials and, in the worst case, even cause engine failure.

Riding on natural bodies of water containing solid particles, such as cyanobacteria, algae or grasses, can lead to them settling and clogging the cooling system, which negatively affects its function and service life.

To ensure correct running, function and a long service life of the cooling system, we strongly recommend thorough rinsing with fresh water after every use in a marine environment, on a lake or other natural bodies of water.

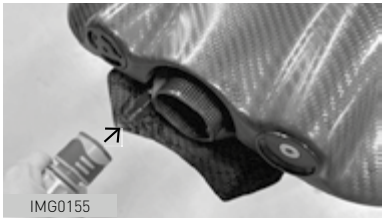
Procedure for flushing the engine cooling system:

CRUISER DFI
RACE DFI
RACE DFI SL
RACE DFI SKI

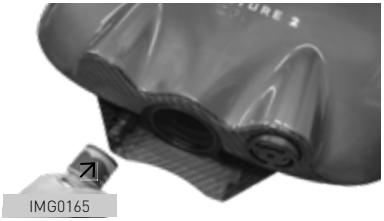

IMG0154

1 - Connect the fresh-water hose end to the Jetsurf drive cleaning connection.
2 - Start the engine. The engine must not run for more than 10 seconds without a water supply.
3 - Turn on the water supply.
4 - For 1 - 2 minutes, carry out cleaning with random throttle applications (not 100%).
5 - Turn off the water and disconnect the hose with the end fitting.
6 - For a maximum of 5 - 10 seconds, apply throttle randomly until water stops spraying out of the exhaust (not 100% throttle).
7 - Switch off the engine.

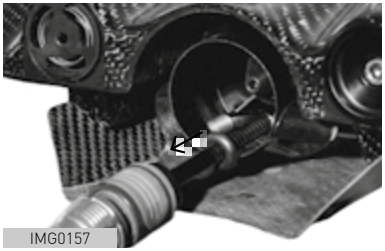
TITANIUM DFI SL
TITANIUM DFI SKI


IMG0155

ADVENTURE 2 DFI


IMG0165

OLD MODEL
WITHOUT ECA


IMG0157

If you own a model without the ECA cleaning system, follow the instructions below.

1 - Fit the A002091 cleaning adapter onto the hose end.
2 - Connect the adapter to the cooling inlet in the water jet. *Insert the adapter into the water jet and then click it into the cooling inlet towards you (the O-rings on the adapter must not be visible).
3 - Start the engine. The engine must not run for more than 10 seconds without a water supply.
4 - Turn on the water supply.
5 - For 1 - 2 minutes, carry out cleaning with random throttle applications (not 100%).
6 - Turn off the water and disconnect the hose with the end fitting.
7 - For a maximum of 5 - 10 seconds, apply throttle randomly until water stops spraying out of the exhaust (not 100% throttle).
8 - Switch off the engine.

10.6. CLEANING AND LUBRICATING THE DRIVETRAIN COMPONENTS

When rinsing the engine compartment, take care that all parts that were in contact with water are properly rinsed - especially if the JETSURF was operated in salt water.

Riding in salt water leaves salt residue on the components, which can accelerate corrosion and the degradation of materials.

To preserve a long service life and aesthetic appearance, we strongly recommend thorough rinsing with fresh water after every use in a marine environment, on a lake or other natural bodies of water.

Procedure for cleaning the engine compartment after riding:

1. Suctioning residual water from the engine compartment - Using the suction pump, remove water residue from the bottom of the engine compartment. Focus on the areas under the engine and around the pump - sea or lake water can leave sediments and salt.
2. Rinse with fresh water - Gently rinse the whole engine compartment with clean fresh water - a low-pressure shower or hose is recommended. Avoid direct pressure on the electrical connectors.

   Thoroughly wash:

   - the engine parts
   - the walls and bottom of the engine compartment
   - the areas around the pump, exhaust, tank and control unit

3. Drying the engine compartment - After rinsing, use the suction pump again to remove most of the water. Then dry the rest using absorbent cloths or microfibre towels. Take care to dry even the hard-to-reach places (e.g. around the tank, control unit and under the engine).
4. Visual condition check - Carry out a visual inspection - check for dirt in hard-to-reach places, or signs of corrosion.
5. Cleaning the fuel tank (recommended) - Disconnect the fuel pump power connector, the breather hose and the fuel line hose, see chapter 6. Remove the fuel tank from the float. Finish cleaning the tank using a damp cloth or a microfibre towel. Take care that water does not get into the fuel line quick coupling and the pump power connector.



Warning
Risk of engine corrosion. If the engine ingests salt water during operation and the combustion chamber is thereby flooded, there is a risk of rapid corrosion of the internal engine components. During cleaning after riding, this operation must be carried out before the standard cleaning of the cooling system as per point **10.5. FLUSHING THE ENGINE COOLING SYSTEM.**

Procedure for cleaning the combustion chamber in the event of flooding:

1. Remove the spark plug as per point **12.5. REMOVING WATER FROM A FLOODED ENGINE** (steps 1-3).
2. Set the throttle to the 100% position on the throttle handle.
3. Feed clean water from a hose into the intake throttle valve / engine air intake.
4. While spraying water into the engine intake, simultaneously turn the starter for 10-15 s as per point **12.5. REMOVING WATER FROM A FLOODED ENGINE** (step 6).
5. Once the flush is complete, follow the standard procedure for removing excess water from the combustion chamber as per point **12.5. REMOVING WATER FROM A FLOODED ENGINE.**

After cleaning the combustion chamber with water, the internal parts of the combustion engine must be lubricated. This is best achieved by carrying out the standard cleaning of the cooling system as per point **10.5. FLUSHING THE ENGINE COOLING SYSTEM.**

For easier orientation as to where the engine intake is located, refer to the image **IMG0090 / IMG0112.**



Note

For comfortable riding and the correct functioning of the Jetsurf, it is essential to keep the throttle lever of the control handle pressed throughout the ride. It is not necessary to maintain full speed, but at insufficient speed the vessel is unstable and harder to control.

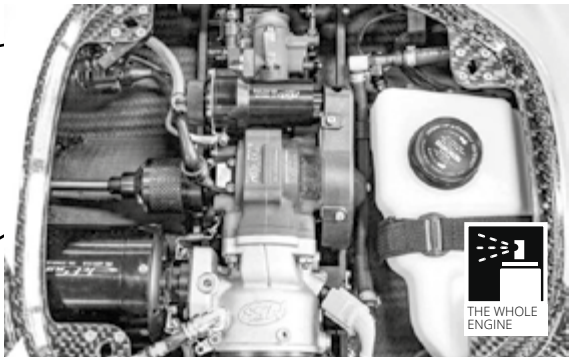
After cleaning, the metal parts in the engine compartment must be treated with preservation grease (see recommended type below), especially after riding in salt water. Salt water causes corrosion of the metal parts of the engine. If you treat these parts with preservation grease, you will significantly reduce the corrosive effect of salt water.

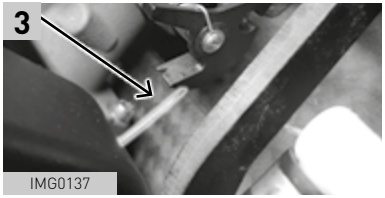
Recommended grease - For routine maintenance we recommend using a spray grease based on mineral or silicone oils, also suitable for fine mechanisms. Such grease helps protect sensitive parts from corrosion, repels moisture and ensures reliable functioning of all systems, including the controls and connectors.

Apply preservation grease to: 1 - The central drive shaft bearing. 2 - The gears



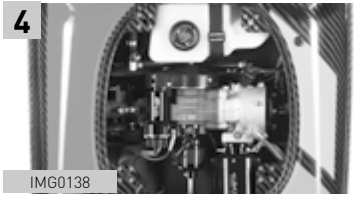






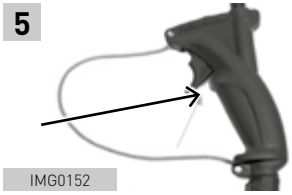
IMG0137

3 - The throttle cable



IMG0138

4 - Generally the whole engine and other metal parts, such as the exhaust and the water jet drive shaft.



IMG0152

5 - If the Jetsurf is operated in salt water, lubricate the moving parts of the control handle once every 5 tanks.

10.7. LUBRICATING THE ALTERNATOR

If the Jetsurf is fitted with an alternator, the metal parts of the alternator must also be lubricated:



IMG0158

- Spray oil into the central lubrication system located by the engine compartment cover latch, see IMG0161
- Also spray preservation grease onto the exposed bearings of the alternator.

Warning
Do not use products containing white spirit, glycols or other aggressive solvents, as they can cause damage to the rubber and plastic sealing elements.

Warning
The manufacturer is not liable for any damage caused by the use of unsuitable or aggressive cleaning agents. When washing, always take a gentle approach and thoroughly rinse all treated surfaces.

Warning
Do not wash out the engine compartment with the fuel tank disconnected, and always make sure that water does not come into contact with open wiring connectors.

10.8. CHECKING THE ELECTRIC PUMP

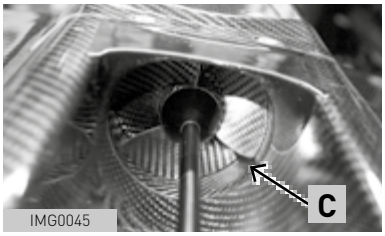


IMG0143

- The electric pump is an important part of the Jetsurf. The electric pump is used to suction water out of the engine compartment.
- A small amount of water can get into the engine compartment through the air vents required for the engine to run, or during a fall.

Before riding, check whether there are any deposits or other contamination at the water inlet of the electric pump; if there are, remove the contamination
. Also check whether the filter **(A)** at the water inlet of the electric pump is dirty and whether water will be able to pass through the filter.

10.9. CHECKING THE WATER JET



IMG0045

- Before riding, check the cleanliness and condition of the water jet blades **(C)**. Their condition can result in reduced performance of the motorised board.

Warning (Risk of injury)
Under no circumstances put your fingers or any objects into the water jet unless you are absolutely certain that the motorised board is switched off and cannot be started.

11 STORAGE

11.1. SHORT-TERM STORAGE

For short-term storage, for example between individual riding days, it is enough to follow the steps described in chapter 10, “After riding”. After carrying out these steps, store the motosurf in a dry place.



Caution (Material damage)
Store the Jetsurf with the engine compartment cover open so that its internal spaces dry out completely.

11.2. LONG-TERM STORAGE

For a break longer than one week it is essential to carry out further tasks.



Note
Do not underestimate these steps. Bear in mind that if you take good care of the motosurf, you will increase the service life of all its parts.

- For at least three days, always start the engine and accelerate several times.
- Remove the fuel tank from the board. Drain all fuel from the tank and rinse it out properly. Store the tank away from the motosurf.



Caution (Material damage)
Charge the battery before long-term storage. During winter or while the Jetsurf is not in use, it is essential to recharge the batteries in the ICU once every 2 months.
Under no circumstances store the battery at higher temperatures, as this would greatly accelerate its ageing process.

- Once every 6 months, always lubricate all metal parts with preservation grease.
- Clean the motosurf.
- Store the motosurf in a dry place that is not subject to large temperature fluctuations.



Caution (Material damage)
Failure to follow these steps leads to a significant reduction in service life or, in extreme cases, to irreversible damage to the motosurf.

Failure to follow these steps leads to a significant reduction in service life or, in extreme cases, to irreversible damage to the motosurf.

Always maintain your motorised surfboard properly and expect a deterioration in its condition that comes with time and as a result of operation or poor handling.

The basic prerequisite for good maintenance is following the procedures described in chapter **8. BEFORE RIDING** and chapter **10. AFTER RIDING**

12.1. SURFACE MAINTENANCE

Maintaining a top layer of quality wax on the surface of the motorised surfboard is the key to preserving the original high-gloss finish for years to come. Use only quality wax, e.g. carnauba. Failure to protect this top layer may void the warranty.

12.2. MAINTENANCE OF THE TECHNICAL EQUIPMENT

Regularly check the technical equipment of the engine compartment to prevent greater damage to the board. If damage appears on any of the board's components, or if you are unsure whether everything is in order with the board, contact your authorised Jetsurf dealer.

12.3. ENGINE MAINTENANCE

Before and after every ride, always lubricate all engine parts with preservation grease. If the Jetsurf is not used for a longer period, follow the instructions given in chapter 11.2. Once every 12 months we recommend carrying out a complete service inspection.

12.4. REPLACING THE SPARK PLUG

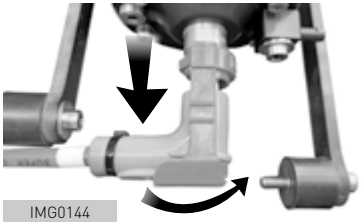


Warning (Risk of injury)
Before working in the engine compartment, we recommend letting the engine cool down if it is hot. We recommend carrying out work in the engine compartment no sooner than 30 minutes after switching off the engine.

Never remove the boot from the spark plug while the Jetsurf electronics are active. Make sure the indicator is neither lit nor flashing.

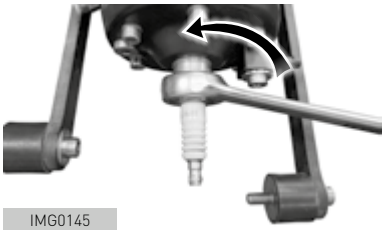
Do not remove the boot from the spark plug if there is water or petrol in the engine compartment. Pay particular attention to petrol vapours. Do not remove the boot from the spark plug if a smell of petrol can be detected from the float.

When working in the engine compartment, do not handle a flame and make sure there is no flammable material within 2 m of the Jetsurf.



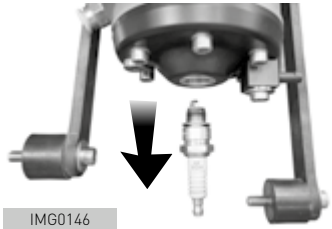
IMG0144

1 - Pull the spark plug holder out to the side.
2 - Slide the ignition coil boot off the spark plug.



IMG0145

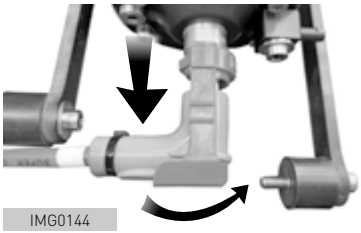
3 - Using the spark plug spanner, unscrew the spark plug. Check the plug and dry it if necessary.
4 - First screw the new spark plug into the engine by hand.



IMG0146

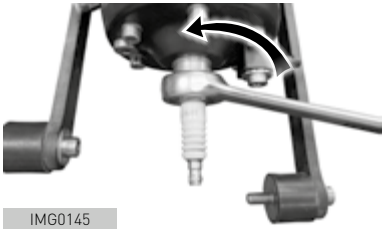
5 - Once the spark plug is seated, carefully tighten it using the spark plug spanner. If the spark plug is new, tighten it with the spanner by 2/3 of a turn. In the case of an older (worn) spark plug, tighten it with the spanner by 1/8 - 1/4 of a turn.
6 - Fit the ignition coil boot onto the spark plug. The ignition coil boot is correctly fitted when the spark plug insulator is completely covered by the ignition coil boot.
7 - Fit the spark plug holder onto the ignition coil boot.

12.5. REMOVING WATER FROM A FLOODED ENGINE



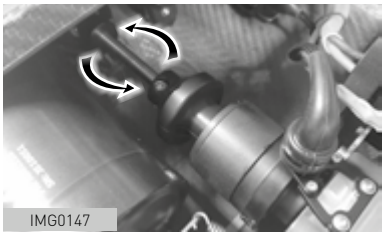
IMG0144

1 - Pull the spark plug holder out to the side.
2 - Slide the ignition coil boot off the spark plug.

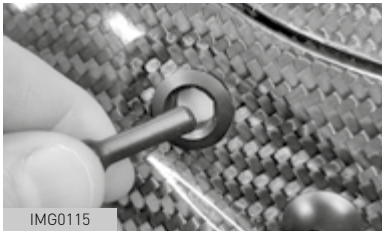


IMG0145

3 - Using the spark plug spanner, unscrew the spark plug. Check the plug and dry it if necessary.

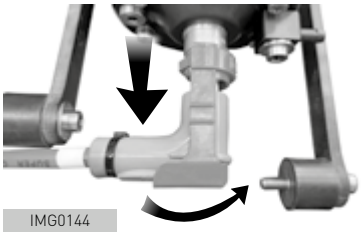

IMG0147

4 - Tilt the Jetsurf onto its starboard side so that the hole left by the removed spark plug faces the ground.
5 - Manually turn the water jet shaft. If there is water (or fuel residue) in the engine, the piston in the engine will begin to force it out through the hole left by the removed spark plug.

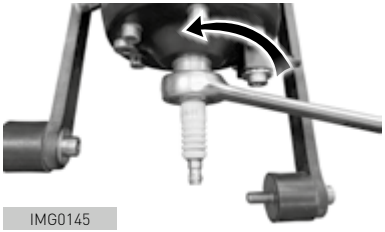

IMG0115

6 - If turning the shaft manually forces out only a minimal amount of water, you can use the power of the starter to force out the last residues. Hold the magnet against the board's indicator. Turn the starter for less than 10 seconds, and with repeated use check the temperature of the starter by touch.
7 - If you no longer see any water draining out, carry out steps 4 to 7 of subchapter 12.4.

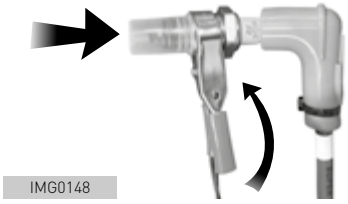
12.6. CHECKING THE FUNCTION OF THE SPARK PLUG AND THE SPEED SENSOR


IMG0144

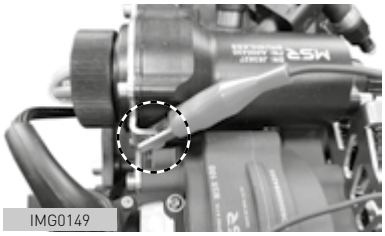
1 - Remove the spark plug holder.
2 - Slide the ignition coil boot off the plug.


IMG0145

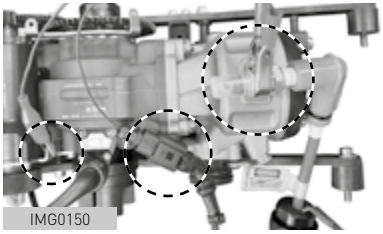
3 - Using the spark plug spanner, unscrew the spark plug. Check the plug and dry it if necessary.
4 - Put the spark plug back into the ignition coil boot.


IMG0148

5 - Fit the cap onto the spark plug electrode.
6 - Attach the large crocodile clip to the metal part of the spark plug.
7 - Attach the small crocodile clip to the eyelet of the engine earth cable.
8 - Disconnect the charging / alternator connector and connect the spark plug tester to the ignition unit (ICU).


IMG0149

9 - Using the start key, activate the board's electronics and put the Jetsurf into the standby phase.
10 - Using the start key, put the Jetsurf into the active phase. The engine starter will spin, but because the spark plug is disconnected from the engine, no start occurs. At this point electrical sparks will be visible on the plug electrode.
11 - After 5 seconds, pull the magnet out of the ignition socket of the control handle and, if necessary, repeat the procedure from step 10


IMG0150

12 - When ending the test, carry out steps 4 to 7 of subchapter **12.4. REPLACING THE SPARK PLUG**

Warning (Material damage)
Repeat the spark test a maximum of 10 times. Excessive use of the starter can cause it to overheat and be damaged.

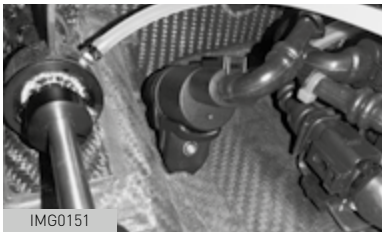
Note
In daylight the spark may be harder to see. There may not be a single spark, but rather several smaller sparks may be visible.

TEST EVALUATION

Not a single spark appears on the spark plug electrode throughout the test. - In this case it can be concluded that the spark plug is not working and needs to be replaced.

Not a single spark appears on the spark plug electrode during starting. When the start key is pulled out of the ignition socket of the control handle (Step 11), a spark appears on the electrode. - From this result we can determine that the spark plug is working but is not receiving a signal from the speed sensor. In this case, contact an authorised Jetsurf centre.

12.7. CLEANING THE ELECTRIC PUMP



IMG0151

1 - Disconnect the electric pump from the electronics.
2 - Unscrew the electric pump from the electric pump holder.
3 - Clean the filter at the inlet of the electric pump and visually inspect its blades.
4 - Also clean the bottom of the engine compartment around the location of the electric pump. Sand and small particles can damage the blades of the electric pump.



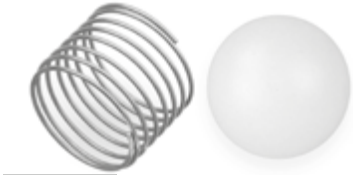
IMG0143

12.8. CLEANING THE EXHAUST SILENCER / EXHAUST TIP



IMG0130

1 - Loosen the nut and pull the silencer out of the exhaust tip.
2 - Remove the spring and ball from the exhaust tip.
3 - Clean all the removed parts of soot and dirt.
4 - Fit the ball, spring and silencer back onto the exhaust tip.



IMG0131

Warning (Material damage)
The exhaust tip spring is conical in shape. The spring must point with its narrower diameter towards the ball and with its larger diameter out of the board. Otherwise the ball may jam in the spring and the whole mechanism will stop working.

Note
The same procedure can also be used for models without a silencer. After removing the exhaust tip cover, you can reach the exhaust ball and spring.

13 TRANSPORT



Warning (Material damage)
Never transport the JetSurf without removing and cleaning the fuel tank. Transporting fuel can be dangerous and in some jurisdictions may even be unlawful.

Always transport the JetSurf only with the fuel tank removed.

Before transporting the board, make sure there is no water in the exhaust system. It could get into the engine during transport.

Always remove both the side and the centre fin.
Despite its strength, carbon composite is a brittle material, and therefore it is not enough to pack the board into the original transport bag – you must also add further protective elements such as bubble wrap and a cardboard box.

13.1. PREPARING THE JETSURF FOR AIR TRANSPORT

Before air transport, several essential steps must be carried out so that transporting the JETSURF meets the safety requirements of the airlines.

ICU unit – how to prepare for air transport

The ICU unit must be removed before transport. During air transport the ICU must be stored in hand luggage and must not remain mounted in the board.

Fuel tank – how to prepare for air transport

Airlines take a very strict approach to transporting equipment containing fuel residues. For this reason it is absolutely essential to prepare the fuel tank according to the following procedure:

1. **Emptying the tank**
   Make sure the tank is safely disconnected from the fuel system. Drain the remaining contents of the tank completely into a suitable container intended for handling operating fluids.

2. **Removing the fuel filter**
   Remove the fuel filter and remove any fluid residues from the filter area too.

3. **Drying with paper towels**
   Using clean absorbent paper towels, thoroughly wipe out the interior of the tank, including the bottom and the area where the filter was removed. Repeat the process until the walls and bottom of the tank are completely dry and free of residue. If necessary, compressed air can also be used for drying - for example to remove residual moisture from less accessible areas.
   Take care, however, that the air stream is not too strong and does not damage the internal parts of the tank.

4. **Natural ventilation**
   Leave the tank open in a well-ventilated outdoor location for at least 24 hours.
   Place it away from direct sunlight and sources of heat.

5. **Packing the tank**
   Once completely dry and ventilated, pack the tank in a plastic bag or film. Place the packed tank with your checked luggage (separately from the Jetsurf float).

Float – how to prepare for air transport

1. **Cleaning the engine compartment** - In the same way as the fuel tank, also clean the engine compartment so that no fuel residues or operating fluids remain in it.
2. **Preparing the float for transport** - Prepare the float for transport in accordance with the instructions given in chapter 10.4., which describes the recommended way of cleaning and treating the outer surfaces of the float. Check the tightness of the covers, the attachment of components and the cleanliness of the exposed surfaces.
3. **Packing the JETSURF** - Then pack the whole JETSURF into the original transport bag intended for air transport. Make sure the board is in a stable position and is not exposed to mechanical damage.



Warning
Before packing, make sure that no part of the JETSURF or the transport bag **shows any smell of fuel or other operating fluids.**



Warning
Do not use water to clean the interior of the tank. Residual moisture can penetrate the fuel system and **disrupt the engine's function or prevent it from starting.**



Warning
Do not use aggressive chemical agents, such as acetone, white spirit or solvents – this could lead to damage **to the plastic parts of the tank.**



Warning
For air transport **do not return the used filter back into the tank.** Always use a new fuel filter.



Note
Your authorised JetSurf dealer will be happy to help you with transporting the board.

13.2. TRANSPORT TO SERVICE

Before transport, contact the authorised service centre about the fact that you are planning to send your surfboard. The authorised service centre will be happy to help with your questions and advise on how to prepare the board. If the problem can be resolved without the need to send the board, the authorised service centre can send you a spare part with a detailed description of how to replace it.

14 TECHNICAL INFORMATION

DESCRIPTION	JETSURF ADVENTURE 2 DFI	JETSURF RACE DFI SL
Length (mm)	1800	1800
Width (mm)	600	600
Height (mm)	150	150
Weight without bindings (kg)	20	19,5
Passenger transport capacity	One user	One user
Maximum load (kg)	120	120
Category*	D	D
Maximum speed	55 km/h (35 mph)	58 km/h (36 mph)
ELECTRONICS		
Control unit	ICU processor	ICU processor
Starter	3-phase BLDC	3-phase BLDC
Battery	Li-Ion 100 Wh (9 Ah); nominal voltage 11.1 V; maximum charging voltage 12.6 V	Li-Ion 100 Wh (9 Ah); nominal voltage 11.1 V; maximum charging voltage 12.6 V
MOTOSURF CONSTRUCTION		
Hull	100% carbon composite	100% carbon composite
DRIVE		
Drive type	Single-stage axial jet pump	Single-stage axial jet pump
Impeller material	Carbon composite	Carbon composite
Nozzle material	Carbon composite	Carbon composite
Manufacturer	MSR Engines s.r.o.	MSR Engines s.r.o.

* - Directive 2013/53/EU - Definition of boat design category D:
¨D. Sheltered waters - designed for voyages in sheltered coastal waters, small bays, on small lakes, rivers and canals, where winds up to and including force 4 and significant wave heights up to and including 0.3 m may be encountered, with occasional waves up to a maximum height of 0.5 m, for example from passing surfboard.¨

JETSURF TITANIUM DFI SL	JETSURF RACE DFI SKI	JETSURF TITANIUM DFI SKI	JETSURF CRUISER DFI
1800	1800	1800	1800
600	600	600	600
150	150	150	150
18,5	24,9	24,9	20,5
One user	One user	One user	One user
120	120	120	120
D	D	D	D
64 km/h (40 mph)	58 km/h (36 mph)	62 km/h (39 mph)	55 km/h (35 mph)
ICU processor	ICU processor	ICU processor	ICU processor
3-phase BLDC	3-phase BLDC	3-phase BLDC	3-phase BLDC
Li-Ion 100 Wh (9 Ah); nominal voltage 11.1 V; maximum charging voltage 12.6 V	Li-Ion 100 Wh (9 Ah); nominal voltage 11.1 V; maximum charging voltage 12.6 V	Li-Ion 100 Wh (9 Ah); nominal voltage 11.1 V; maximum charging voltage 12.6 V	Li-Ion 100 Wh (9 Ah); nominal voltage 11.1 V; maximum charging voltage 12.6 V
100% carbon composite	100% carbon composite	100% carbon composite	100% carbon composite
Single-stage axial jet pump	Single-stage axial jet pump	Single-stage axial jet pump	Single-stage axial jet pump
Carbon composite	Carbon composite	Carbon composite	Carbon composite
Carbon composite	Carbon composite	Carbon composite	Carbon composite
MSR Engines s.r.o.	MSR Engines s.r.o.	MSR Engines s.r.o.	MSR Engines s.r.o.

DESCRIPTION	JETSURF ADVENTURE DFI	JETSURF RACE DFI SL
ENGINE		
Power unit	Two-stroke horizontal engine, single-cylinder	Two-stroke horizontal engine, single-cylinder
Cooling	Water	Water
Lubrication system	Pre-mixed petrol and oil mixture	Pre-mixed petrol and oil mixture
Petrol	Minimum octane rating (RON) 95, unleaded	Minimum octane rating (RON) 95, unleaded
Oil	Oils meeting the NMMA TC-W3, API TC, ISO-L-EGD: JASO FD/FC standard	Oils meeting the NMMA TC-W3, API TC, ISO-L-EGD: JASO FD/FC standard
Mixture preparation	Digital fuel injection	Digital fuel injection
Cylinder capacity (cc)	100	100
Spark plug	NGK BP (R) 7HS	NGK BP (R) 7HS

JETSURF TITANIUM DFI SL	JETSURF RACE DFI SKI	JETSURF TITANIUM DFI SKI	JETSURF CRUISER DFI
Two-stroke horizontal engine, single-cylinder	Two-stroke horizontal engine, single-cylinder	Two-stroke horizontal engine, single-cylinder	Two-stroke horizontal engine, single-cylinder
Water	Water	Water	Water
Pre-mixed petrol and oil mixture	Pre-mixed petrol and oil mixture	Pre-mixed petrol and oil mixture	Pre-mixed petrol and oil mixture
Minimum octane rating (RON) 95, unleaded	Minimum octane rating (RON) 95, unleaded	Minimum octane rating (RON) 95, unleaded	Minimum octane rating (RON) 95, unleaded
Oils meeting the NMMA TC-W3, API TC, ISO-L-EGD: JASO FD/FC standard	Oils meeting the NMMA TC-W3, API TC, ISO-L-EGD: JASO FD/FC standard	Oils meeting the NMMA TC-W3, API TC, ISO-L-EGD: JASO FD/FC standard	Oils meeting the NMMA TC-W3, API TC, ISO-L-EGD: JASO FD/FC standard
Digital fuel injection	Digital fuel injection	Digital fuel injection	Digital fuel injection
100	100	100	100
NGK BP (R) 7HS	NGK BP (R) 7HS	NGK BP (R) 7HS	NGK BP (R) 7HS

Service		
The prescribed service work has been carried out in full according to the most up-to-date service checklist and has been documented in the Jetsurf system. Only original Jetsurf spare parts or spare parts and accessories approved by Jetsurf were used during the service work.		STAMP AND SIGNATURE OF THE SERVICE CENTRE OPERATIVE
Motosurf serial number:		
Date:		
km / operating hours:		

Service		
The prescribed service work has been carried out in full according to the most up-to-date service checklist and has been documented in the Jetsurf system. Only original Jetsurf spare parts or spare parts and accessories approved by Jetsurf were used during the service work.		STAMP AND SIGNATURE OF THE SERVICE CENTRE OPERATIVE
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STAMP AND SIGNATURE OF THE SERVICE CENTRE OPERATIVE

Motosurf serial number:	
Date:	
km / operating hours:	

16 WARRANTY

Section 1. WARRANTY PARAMETERS, SCOPE

1 - The manufacturer provides the customer with a warranty for a period of 1 (one) year, in those countries where the manufacturer's liability for product defects is not guaranteed by law for a longer period (hereinafter the "Jetsurf warranty"). If local legislation stipulates a longer statutory warranty period, the longer period laid down by that legislation applies.

2 - The Jetsurf warranty is a guarantee of quality, by which the manufacturer declares that for the duration of the warranty the product will be fit for its usual purpose or will retain its usual properties. Usual purpose and properties are understood to be those that the manufacturer declares in its official materials and presentations.

3 - The Jetsurf warranty covers the construction materials and workmanship during the manufacture of the Jetsurf and its engine.

4 - The warranty is provided for products that are properly maintained and for which the instructions given in the user manual or other manufacturer's materials are followed. Service work must be carried out by the manufacturer, an authorised dealer or an authorised service centre. If service is carried out by another party, the warranty lapses only if the unauthorised intervention demonstrably caused the defect.

5 - The Jetsurf warranty is not provided for emissions and their level; the manufacturer is responsible only for the emission level in accordance with the specification valid on the day the Jetsurf was sold to the customer. The manufacturer provides a warranty on emission-related components, including those that could affect an increase in evaporative emissions, for a period of 12 months from the Jetsurf being put into operation.

6 - This warranty supplements and does not replace the consumer's statutory rights arising from the applicable legislation of the given country. In the event of a conflict between these terms and local legislation, the binding provisions of local law always take precedence.

7 - The Jetsurf warranty begins on the day the product is handed over to the end user.

8 - Notice for the US market: This warranty is provided as a "Limited Warranty" within the meaning of the federal Magnuson-Moss Warranty Act (15 U.S.C. §2301).

9 - This warranty gives you specific rights, and you may have other rights which vary from state to state.

10 - The warranty is not voided merely because the product was serviced outside the authorised network, provided that this intervention was not the cause of the defect.

Section 2. CLAIMING THE WARRANTY AND CONDITIONS

1 - If you discover a defect on your Jetsurf that could be subject to warranty, contact your authorised dealer without undue delay, at the latest within 30 days of discovering the defect. The cost of transporting the Jetsurf to an authorised service centre is borne by the user, unless otherwise agreed in writing. If the claim is recognised as justified, the manufacturer or authorised dealer may reasonably reimburse the user for transport costs.

2 - The manufacturer will assess the claim within a reasonable period, usually within 30 days of the Jetsurf being delivered to the service centre, and will inform you of the outcome.

3 - If the claim is recognised as justified, the manufacturer will repair or replace the defective part. Spare parts may be new or refurbished, with the same or better properties.

4 - If repair is not possible, the manufacturer will provide a replacement Jetsurf or refund the purchase price, taking into account the degree of wear. The choice of how to resolve the defect rests with the manufacturer, unless local law provides otherwise.

5 - If the claim is unjustified, the user bears the cost of return transport of the product.

6 - In the case of a consumer, claiming the warranty is governed by the consumer protection legislation valid in the country of purchase.

7 - Authorised dealers and service centres are independent entities and the manufacturer is not responsible for their organisational procedures or the planning of service capacity.

Section 3. WARRANTY EXCLUSIONS AND LIMITATIONS

1 - The warranty cannot be recognised in the following cases:
- a - normal operational wear of parts or consumables requiring regular maintenance,
- b - damage arising as a result of an accident, fall, jumps, improper handling, unskilled handling or neglected maintenance,
- c - damage caused by unauthorised modifications, repairs or the installation of non-original parts or accessories,
- d - damage arising from the use of unsuitable, poor-quality or incorrectly mixed fuel, oils or other fluids,
- e - damage caused by the entry of foreign objects (e.g. sand, stones, mud, dirt or other debris) into the engine or drive system,
- f - damage arising from the use of unsuitable cleaning agents,
- g - damage caused by the effects of natural influences (e.g. frost, moisture, UV radiation, corrosive environment),
- h - damage arising from operation contrary to the operating instructions or outside the intended operating conditions.

2 - Wear parts: The warranty does not cover normal wear of parts subject to mechanical stress or parts performing rotary motion, such as bearings, oil seals, gaskets, shafts, piston rings, piston, connecting rod, engine parts and drive parts. These parts may wear or degrade due to operation without any manufacturing defect and must be replaced as part of regular maintenance at the user's expense. The warranty applies only to cases where these parts demonstrably fail as a result of a manufacturing or material defect.

3 - No one, including dealers, distributors or other parties, is authorised to change, add to or extend the scope of these warranty conditions without the prior written consent of the manufacturer.

Section 4. LOCAL WARRANTY SPECIFICS

In the event that local legislation does not allow the full scope of this warranty or requires different conditions, binding local provisions always take precedence. The authorised JETSURF dealer in the given country will provide you with up-to-date information on local warranty specifics.

Section 5. DISPUTES

1 - Resolve disputes arising from the warranty first out of court through your authorised dealer or directly with the manufacturer.

2 - Consumers may use alternative dispute resolution (ADR) in accordance with local legislation.

3 - In the case of businesses, disputes are resolved first amicably, then in accordance with the relevant legislation of the country of purchase.

Section 6. FINAL PROVISIONS

This warranty supplements the consumer's statutory rights under the legislation of the relevant state. In the event of a conflict between this warranty and local legislation, the binding provisions of local consumer protection law take precedence.

17 USER SAFETY AND RESPONSIBILITY

The product must be used solely in accordance with these operating instructions. The manufacturer, importer and dealer accept no liability for harm to health, property or for damage to the product arising as a result of:

- improper use,
- failure to follow the instructions given in these instructions,
- unskilled maintenance or interventions into the construction of the product,
- the use of non-original spare parts or accessories.

The warranty cannot be recognised if the product or part of it is damaged as a result of failure to follow the instructions given in this manual or by carrying out the activities listed below.

THE USER MUST NOT CARRY OUT THE FOLLOWING ACTIVITIES:

1. Transporting the motorised surfboard with the fuel tank inserted in the surfboard.
2. Attempting to stop the running engine or water pump with any tools or body parts.
3. Interfering with the construction of the engine or other parts of the motorised surfboard.
4. Using an ignition unit or charger other than those supplied by the manufacturer.
5. Charging the battery when:
   a. the engine is running,
   b. the ignition unit is switched on,
   c. the surfboard is in the water.
6. Leaving the charging connector open when not in use.
7. Using a charger with a mechanically damaged power cable.
8. Starting the engine without the spark plug boot fitted or while charging the battery at the same time.
9. Riding without the prescribed safety equipment - helmet, life jacket and safety leash.
10. Lending the JetSurf to people without proper instruction and familiarisation with the manual and the risks of operation.
11. Using the JetSurf under the influence of alcohol, drugs or in the event of physical or mental indisposition.
12. Using the JetSurf in shallow, rocky or unverified waters, without first mapping the obstacles.
13. Opening the engine compartment cover while the JetSurf is in the water or in operation.
14. Breaching any provision of this user manual.

PRODUCT REGISTRATION

WHY REGISTER YOUR JETSURF?
By registering, you will help us to:

- Improve our products and services, including the handling of warranty cases.
- Receive faster technical support and access to product updates.
- Enable us to contact you in the event of important safety or technical information (for example, recall campaigns).
- (Optionally) Extend the warranty on your product or gain access to special service offers.

WHAT INFORMATION DO WE NEED?
Please fill in the following details:

- Product type, model and serial number
- Date and country of purchase
- Your name, e-mail address and (optionally) postal address
- Proof of purchase (optional - photo or PDF of the receipt)

Your registration is completely voluntary and takes only a few minutes.

DATA PROTECTION
Your personal data will be processed solely for the purpose of **JETSURF registration, warranty verification and related service communication.**

For more information about how we handle personal data, please see our Privacy Policy
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sales@jetsurf.com

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eshop@jetsurf.com

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Monday to Friday 8:00 - 16:00 CET

Company: MSR Engines s.r.o.

Company ID: 26968215, **VAT ID:** CZ 26968215

Correspondence address: Střelice 864, 664 47 Střelice, Česká republika

Billing address: Krásného 3857/7, 636 00 Brno, Česká republika

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