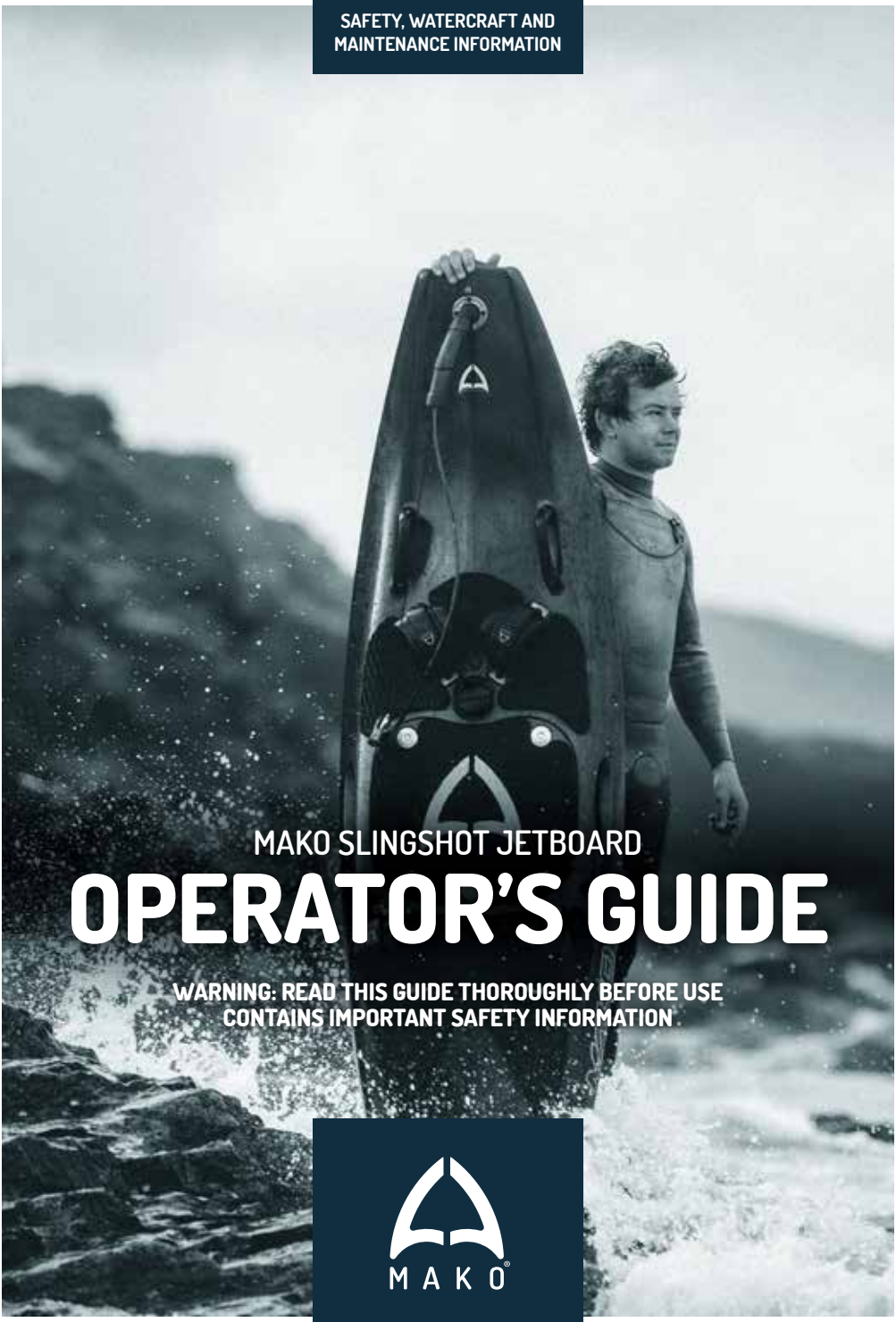
SAFETY, WATERCRAFT AND
MAINTENANCE INFORMATION



MAKO SLINGSHOT JETBOARD

OPERATOR'S GUIDE

WARNING: READ THIS GUIDE THOROUGHLY BEFORE USE
CONTAINS IMPORTANT SAFETY INFORMATION

MAKO®

MAKOBOARDSPORTS.COM

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CONTACT INFORMATION
For support, please contact the company from which you bought the products. For a listing of Authorised Mako Qualified Dealers, visit the Mako website at: http://www.makoboardsports.com.

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Email: info@makoboardsports.com
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MAKO SLINGSHOT JETBOARD

OPERATOR'S GUIDE

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MAKO SLINGSHOT JETBOARD

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Introduction

Thank you and congratulations on the purchase of your new Mako Slingshot jetboard. We hope your board evokes in you excitement and the ultimate sensation of fun.

Designed and manufactured by our team of experienced engineers and technicians, your Mako Slingshot is a quick and agile carbon fibre waterjet-propelled surfboard complete with the right combination of sophisticated technology and sleek design aesthetic. Your Slingshot looks fast, feels fast and moulds classic surf and wakeboard elements into a modern, adrenaline-fuelled package, with all the performance benefits of a traditional watercraft. Your Mako jetboard is easy to ride, easy to stow, and with excellent customer service and support, easy to own.

ABOUT THIS GUIDE

This Operator's Guide has been prepared to acquaint you with your jetboard and its various controls, maintenance and safe riding instructions. Ensure to keep your Operator's Guide in a safe place such as your accessories bag, so that you can refer to it for operation, instructing others, regular maintenance and troubleshooting. This information contained in this guide is correct at the time of publication. However, Mako Boardsports maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured. Some differences between the manufactured product and the descriptions and/or specifications in this guide may occur. Mako Boardsports reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring any obligation upon itself.

READ AND FOLLOW THIS OPERATOR'S GUIDE THOROUGHLY BEFORE USE. THIS GUIDE CONTAINS IMPORTANT SAFETY INFORMATION. DISREGARDING THESE PRECAUTIONS COULD CAUSE SERIOUS INJURY INCLUDING THE POSSIBILITY OF DEATH!

Mako Boardsports stongly recommends reading the following sections before you operate your jetboard:

– SAFETY INFORMATION
– GETTING STARTED

Mako Boardsports highly recommends that you regularly review the relevant Coast Guard and/or Authority regulating the laws pertaining to the use of personal watercraft within the region in which the jetboard will be operated. In certain areas, an operator competency card is required to operate a watercraft.

SAFETY ALERTS & MESSAGES

This Operator's Guide utilises the following symbols and words to emphasise potential injury hazards and important information:

DANGER **DANGER** indicates an eminently hazardous situation which, if not avoided, could result in serious damages, injury or death.

WARNING **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in serious damages, injury or death.

CAUTION **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate damages or injury.

NOTICE **NOTICE** indicates important information or an instruction which may aid the rider in operation or maintenance of the jetboard.

MAKO SLINGSHOT JETBOARD

OPERATOR'S GUIDE

Getting Started

BEFORE YOU START

Setting up your new Mako jetboard couldn't be easier. Just follow these concise instructions and we'll have you up on your board and carving turns in about an hour.

This guide offers you quick and easily accessible information to rapidly acquaint you with your jetboard and its various controls, maintenance and safe riding instructions.

READ AND FOLLOW THE OPERATOR'S GUIDE THOROUGHLY, IN ITS ENTIRETY, BEFORE USE. THE OPERATOR'S GUIDE CONTAINS IMPORTANT SAFETY, OPERATION AND MAINTENANCE INFORMATION.

JETBOARD DEFINITION

The term "jetboard" used throughout this Operator's Guide, means a personal watercraft with similar aesthetical characteristics of a traditional surfboard, that uses an inboard two-stroke engine to provide power to an axial-flow water-jet pump. Water passes underneath the board and enters the pump through an inlet. The water pressure inside the inlet is increased by diffusing the flow as it passes through the impeller blades and stator vanes. The pump nozzle then converts this pressure energy into velocity, thus producing forward thrust.

The jetboard is designed to be operated by a single person ("rider" or "operator") in a propped up prone, kneeling or standing position on the board. Direction of the jetboard is controlled by the rider transferring body weight through either their heels or toes (depending on the direction of turn) which applies pressure to one side of the jetboard more than the other, thus engaging the rail and facilitating the turn. Acceleration of the jetboard is controlled via a throttle trigger held in the rider's hand.

WHAT'S IN THE BOX

So, you're excited. Your Mako Slingshot jetboard has just been delivered on your doorstep. You've carefully opened the box and pulled out its contents. Here's what you should find inside:

1 x MAKO SLINGSHOT JETBOARD
1 x FCS CENTRE FIN
2 x FCS SIDE FINS
1 x QUICK INSTALL BATTERY PACK
1 x BATTERY CHARGER
1 x TOOL KIT
2 x WRISTSTRAPS/ENGINE SHUT-OFF PINS
1 x BOARD BAG
1 x OPERATOR'S GUIDE

THE TOOL KIT

Your Mako Slingshot is shipped with a basic tool kit to aid you in the regular ongoing maintenance and care of your jetboard, so that you can maximise its performance and keep it running at its best, for longer. Here's what you will find inside:

1. TOOL KIT POUCH
2. 2MM, 3MM, 4MM, 5MM ALLEN KEYS
3. LUBRICATION SYRINGE
4. ENGINE FLUSH CONNECTOR
5. CABLE TIES
6. LUBRICATION ADAPTOR
7. SPARK PLUG SPANNER
8. SPARE SPARK PLUG

MAKO OPERATOR'S GUIDE - GETTING STARTED

KNOW YOUR MAKO

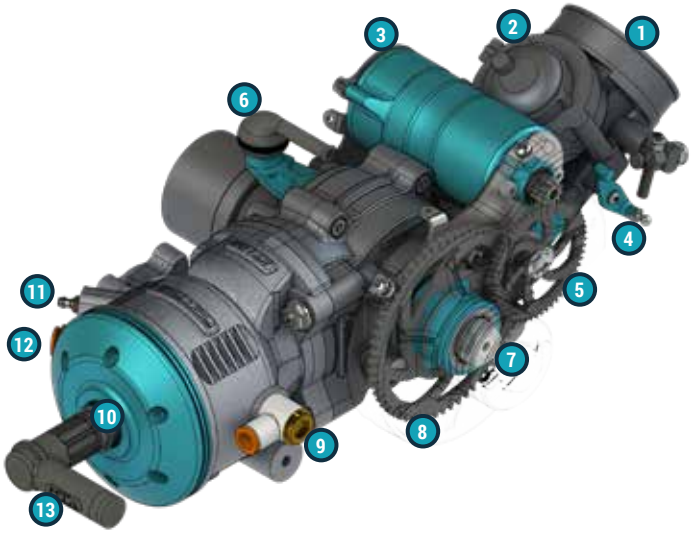
The quickest and easiest way to maximise your enjoyment out on the water and to keep your board running at its best, for longer, is to know your Mako like the back of your hand.

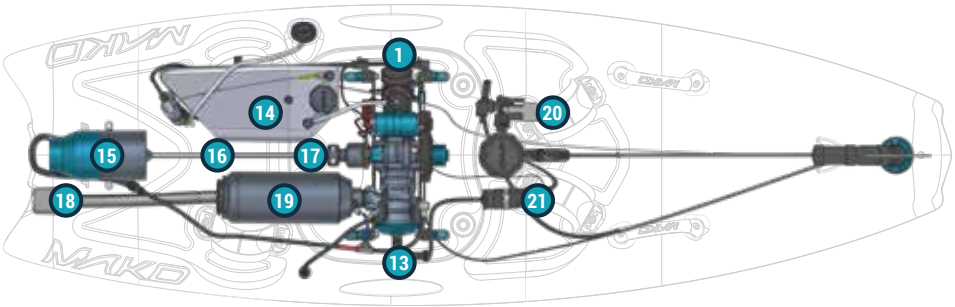
1. SNORKEL
2. CARBON FIBRE MONOHULL
3. GRAB HANDLES
4. FOOT STRAPS
5. LED INDICATOR
6. BATTERY PACK
7. POP-LATCH BUTTONS
8. ENGINE COMPARTMENT LID
9. CARRY HANDLES
10. COOLING OUTLET
11. TRACTION PADS
12. JET-DRIVE INLET
13. JET-DRIVE NOZZLE
14. EXHAUST OUTLET VALVE
15. FCS SIDE FINS
16. FCS CENTRE FIN
17. RIDE PLATE
18. HAND CONTROL
19. START/STOP BUTTON
20. THROTTLE TRIGGER
21. ENGINE SHUT-OFF PIN
22. WRIST STRAP

KNOW YOUR ENGINE

At the heart of your Mako Slingshot jetboard beats the Rotron XT100 2-stroke combustion engine. This compact 90cc powerplant delivers reliability, performance and peace of mind out on the water.

1. AIR INTAKE
2. CARBURETTOR
3. STARTER
4. THROTTLE ARM
5. IDLE GEAR
6. IGNITION PICKUP
7. FREEWHEEL
8. MAIN GEAR
9. COOLING INLET
10. SPARK PLUG
11. EXHAUST COOLING NOZZLE
12. COOLING OUTLET
13. SPARK PLUG CAP
14. FUEL TANK
15. JET-DRIVE
16. DRIVE SHAFT
17. DRIVE COUPLING
18. EXHAUST OUTLET VALVE
19. EXHAUST
20. ENGINE CONTROL UNIT
21. HT COIL PACK





KNOW YOUR ECU

The Engine Control Unit (ECU) is the brain of your Mako Slingshot jetboard and is used to regulate spark generation within the engine ignition system.

WARNING ONLY USE THE ENGINE CONTROL UNIT SPECIFIED AND SUPPLIED BY MAKO BOARDSPORTS. FAILURE TO EXERCISE CAUTION WHILE USING THIS COMPONENT COULD RESULT IN PRODUCT MALFUNCTION, ELECTRICAL ISSUES AND CAN MAKE IT UNSAFE TO OPERATE, AND A WARRANTY CLAIM MAY BE DENIED IF, AMONG OTHER THINGS, THE OWNER CAUSED THE PROBLEM THROUGH IMPROPER USE.

The engine control unit (ECU) is located inside the engine compartment at the front left-hand side of the board and consists of a plastic outer casing filled with a compound to protect its internal electronic components.

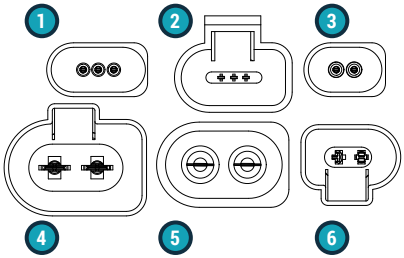
The role of the engine control unit (ECU) is to manage the electrical current that is fed to the ignition coil in order for it to generate the right amount of voltage for the spark plug to ignite the fuel mixture.

The engine control unit (ECU) receives its signal from a magnetic pulse that is synchronised with the speed of the engine and the position of the crankshaft. This digital pulse is, therefore, essentially a switching signal that the ignition coil uses to control the voltage input.

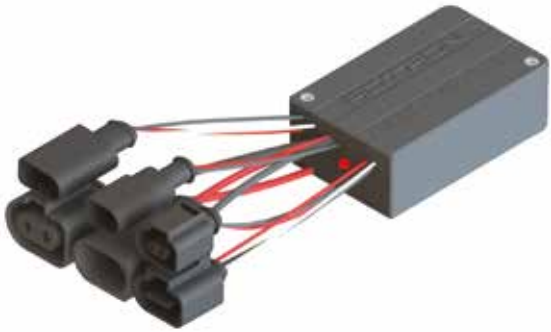
If your jetboard starts to run irregularly or fails to start when you depress the START/STOP button on the hand control unit, could imply a failed engine control unit (ECU). Check the LED Indicator light to determine status and refer to the 'Troubleshooting' section of this Operator's Guide at the earliest opportunity to prevent any further damage to your jetboard.

ECU CONNECTORS

The engine control unit (ECU) is connected to other electrical components using 6 individual connectors. To avoid incorrect connection of components, each cable uses a different connector type as follows:



1. IGNITION PICKUP
2. HAND CONTROL UNIT
3. HT COIL PACK
4. STARTER MOTOR
5. BATTERY PACK
6. LED INDICATOR



KNOW YOUR STATUS

Your jetboard features an LED status indicator light that is located near the battery housing, on the deck of the board. This indicator light provides run-time, error/warning and diagnostic information about your jetboard.

The table below outlines the course of signalling for each status of the LED indicator light. Should the LED status indicator light on the deck of the board become faulty, refer to the backup red-coloured status light located directly on the Engine Control Unit, inside the engine compartment.

INDICATOR	ENGINE SHUT-OFF PIN	START/STOP BUTTON	LED STATUS	STATUS DEFINITION	TROUBLESHOOTING
	Y/N	N	DEFAULT / OFF	The jetboard is powered off and in its inactive configuration.	Faulty, undercharged or flat battery pack. Faulty Engine Control Unit. Unplugged ECU Connectors. Faulty LED or connection.
	Y	Y	SOLID / ON	The jetboard is powered on, ECU is functioning correctly and the starter is cranking the engine for three seconds.	The LED may appear to flash, this is due to engine rotation during starting, this is normal.
	N	Y	SLOW FLASHING FOR 3 SECONDS	The engine shut-off pin is not present or incorrectly located in the hand control unit.	Check for debris in rubber housing on hand control. Re-insert engine shut-off pin.
	Y	N	SOLID / ON	The jetboard is powered on and the engine is running correctly.	---
	Y	Y	RAPID FLASHING FOR 10 SECONDS	Engine failed to start correctly. Starter protection active. Wait ten seconds before attempting another start.	Check spark plug. Ensure engine is primed with fuel. Check jetdrive for obstruction. Ensure drive shaft rotates freely.
	N	Y	SLOW FLASHING AT ENGINE RPM	START/STOP button held for longer than 5 seconds. Engine drain procedure engaged. Engine cranking until START/STOP button released.	Ensure spark plug removed. Process can also be used to test ignition sensor is functioning correctly.
	Y	Y/N	RAPID FLASHING	The battery pack has 20% of its full charge capacity remaining. Return to dry land immediately.	Charge battery pack. Replace battery pack.

KEEP YOUR COOL!

The XT100 engine that powers your jetboard is cooled by circulating water through the engine block, pumped under pressure by the action of the impeller. Water has a higher heat capacity than air, and can thus move heat more quickly away from the engine.

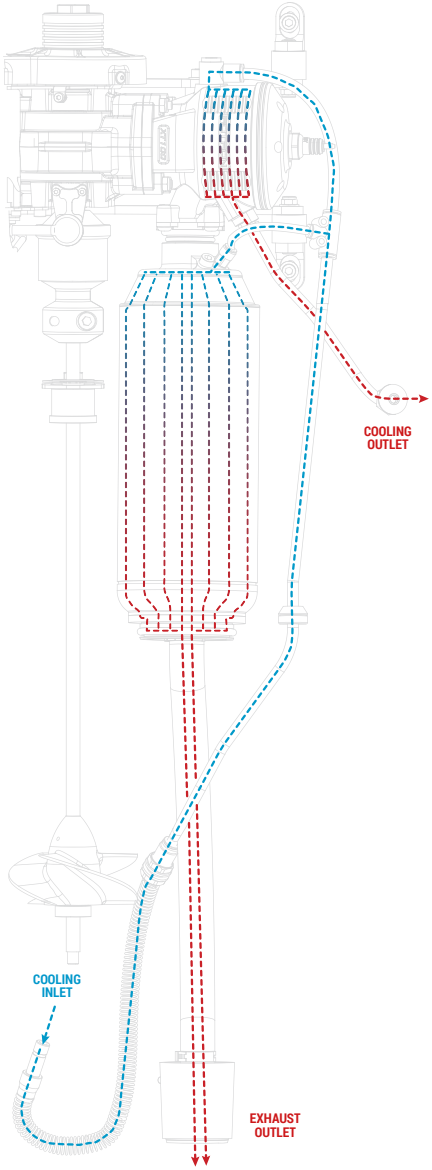
During operation your jetboard has ready access to a large volume of water at a suitable temperature. Water passes underneath the board and enters the axial-flow water-jet pump. The water pressure inside the pump is increased by diffusing the flow as it passes through the impeller blades and stator vanes. The inlet for the cooling system is located inside the jet-drive nozzle and scoops up some of the water before it exits the nozzle. Utilising this pressure energy is what pushes the water through the cooling system.

The jetboard has essentially two separate cooling systems that run off this single source of water: one for the engine and one for the exhaust. Water is forced into the engine and travels through the water-jacket around the cylinder before exiting the cooling outlet located on the right-hand side of the board. Some of the water is also diverted into the exhaust, passing through the muffler and exited at the rear of the board.

PRECAUTIONS

As your jetboard relies on an external water supply for cooling, operation out of water for more than 10 seconds can result in permanent damage to the engine and exhaust system. A warranty claim may be denied if, among other things, the owner caused the problem through improper use.

When riding your jetboard it is imperative to check that a continuous flow of water is coming out from the cooling outlet on the right side of jetboard. Stop engine immediately if flow of water is not apparent.



SETUP YOUR BOARD

The following step-by-step instructions will help you configure and prepare your jetboard, as well as determine whether you favour a regular or goofy stance.

The Mako Slingshot uses a Thruster fin setup and is supplied with three fins which are removed for transport to avoid damage.

As standard, your jetboard uses the FCS II detachable fin system to take the time and hassle out of fitting your fins, while eliminating the need for tools, screws, and hex keys. The fins can be easily installed and removed in seconds.

It is recommend to use all three fins when operating the jetboard to ensure maximum control and stability of your Mako.

FITTING THE FCS SIDE FINS

1. Orientate your jetboard so that the underside is facing upward. Ensure the board is placed on a stable surface, such as the floor using a towel or rug to protect the upper side of the jetboard.

1. Check both fin boxes for obstructions and clean any debris, such as sand, from inside the slots. Check both side fins are free from damage.

2. Take one of the side fins and ensure the flat side of the foil is orientated towards the centre of the jetboard, with the fin rake sweeping toward the rear of the board.

3. Place the front tab on the fin base inside the front slot of the fin box, so that the hook meets the horizontal bar inside the slot. Then, lower the rear tab into the rear slot. The fin locks into place using a combination of downward and lateral force. You will hear an audible click.

4. To remove, brace the front of the fin at its base and stablise the jetboard with your forearm. Grip the fin from the top with your other hand and pull the fin towards the nose of the jetboard, with an upwards force, to release the fin from the box. Use a towel to protect your hand if needed.

FITTING THE FCS CENTRE FIN

To complete the thruster setup, your Mako Slingshot uses a larger centre fin to aid directional stability and control through foot-steering.

TOOLS REQUIRED : 3mm Allen Key

1. Orientate the jetboard so that the underside is facing upward. Ensure the board is placed on a stable surface, such as the floor using a towel or rug to protect the upper side of the jetboard.

2. Check the ride plate fin box for obstructions and clean any debris, such as sand, from inside the slot. Make certain the fin is free from damage and ensure the fin rake is sweeping toward the rear of the board.

3. Identify the small square aperture in the fin box. Angle the rear of the fin upwards and insert the front of the fin into the fin box, so that the metal pin is engaged into the channel.

4. Keeping the rear of the fin upwards, slide the fin forward until you reach the front of the slot. Then, lower the rear of the fin into the box using a combination of downward and lateral force. You will hear an audible click as the barrel mechanism locks the fin into place.

5. Using the 3mm Allen key, insert the grub screw into the rear of the fin box at the base of the fin. Ensure grub screw is securely tightened. Avoid potential damage by not over tightening.

6. To remove, use the 3mm Allen key to remove the grub screw for the fin box. Brace the front of the fin at its base and stablise the jetboard with your forearm. Gripping the fin from the top with your other hand, pull the fin towards the nose of the jetboard with an upwards force to release the rear of the fin from the box. Use a towel to protect your hand if needed. Then, slide the pin at the front of the fin back through the square aperture.

CARBON FIBRE CENTRE FIN (OPTIONAL)

Mako Boardsports offer an alternative carbon fibre ride plate and centre fin, which can be purchased via the Mako online shop or via a Mako Representative. You will find the flex and drive pattern slightly different to the standard centre fin, offering an increase in performance, particularly smoother turns and less drag.

TOOLS REQUIRED : 3mm Allen Key

1. Orientate your jetboard so that the underside is facing upward. Ensure the board is placed on a stable surface, such as the floor using a towel or rug to protect the upper side of the jetboard.

2. Using the 3mm Allen key, remove the six M5 x 12mm bolts that secures the standard ride plate to the board. Store the bolts in a safe place for relocation of the carbon fibre ride plate.

3. Orientate the carbon fibre ride plate so that the short straight edge is located towards the nose of the board. Using the 3mm Allen key, reinsert the six M5 x 12mm bolts into the ride plate. Ensure each retaining bolt is securely tightened. Avoid potential damage by not over tightening.

4. Orientate the carbon fibre centre fin so that the fin rake is sweeping toward the rear of the board and place into the recess in the ride plate.

5. Using the 3mm Allen key, insert the four M5 x 12mm bolts into the four corners of the fin base plate. Ensure each retaining bolt is securely tightened. Avoid potential damage by not over tightening.

NOTICE ***WHEN REMOVING THE CARBON FIBRE CENTRE FIN FOR STORAGE, ENSURE TO ONLY UNSCREW THE FOUR RETAINING BOLTS HOLDING THE FIN TO THE RIDE PLATE. DO NOT REMOVE THE RIDE PLATE. TO AVOID LOSS OF RETAINING BOLTS DURING TRANSPORTATION, GENTLY SCREW THE BOLTS BACK INTO THE RIDE PLATE FOR EASY RELOCATION.***

YOUR STANCE – REGULAR OR GOOFY?

Whether left foot forward or right, your Mako Slingshot gives you ultimate control of your stance and the board. Before you strap into your jetboard, or even setup your foot straps, you'll need to know what stance you are. There are two different kinds of stance, regular and goofy.

NOTICE ***IT IS IMPORTANT TO FIND OUT YOUR NATURAL STANCE STRAIGHT AWAY TO ENSURE YOU PICK UP THE SKILLS YOU NEED TO RIDE MUCH FASTER. MANY RIDERS HAVE STARTED OUT WITH THE WRONG STANCE, ONLY TO REALISE AT A LATER STAGE THAT THE CONTROL THEY NEED OF THEIR BOARD COMES MORE NATURALLY THE OPPOSITE WAY.***

If you do any other boardsports like skateboarding, wakeboarding or snowboarding; chances are you'll ride your jetboard the same way. The important goal is to place your dominant foot at the back of the board in order to provide more precision in movement. The dominant foot will, therefore, do most of the power steering while the less dominant foot provides direction and balance in the front of the board.

We're going to go over a test you can do that will help you determine whether you should start riding with a regular or goofy stance.

1. Stand with your eyes closed with equal weight distributed to both of your feet.

2. Have a friend, or someone you trust, attempt to push you over and see which of your feet you instinctively put out to stop yourself from falling. This foot will likely be the front foot on your jetboard as it centres your balance most.

If having your left foot forward feels unnatural, chances are you're just a naturally goofy rider and should switch to steering with your right foot and providing precision with your left!

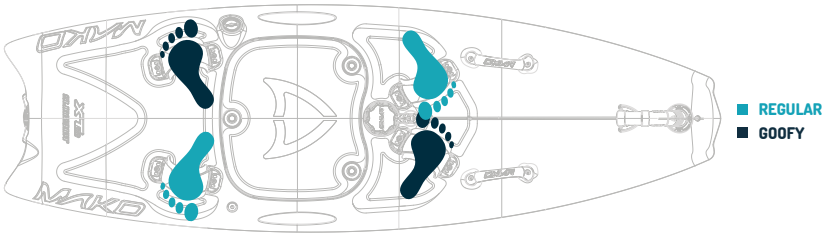
ADJUSTING THE FOOT STRAPS

The Mako Slingshot comes with four easy adjustment Velcro straps. The asymmetrical body shape gives a positive fit yet allows dynamic foot position for a more personalised stance.

1. With the Velcro straps loose, place your foot into the foot strap then loosely secure the tongue of the strap by placing the Velcro across the top of it. For even coverage, place Velcro side by side and spread out across the tongue.

2. Adjust the Velcro straps as needed until you achieve the desired level of coverage and support. Pull your foot completely out of the strap and then re-insert to double check the overall fit and ease of re-entry.

The perfect fit will vary between riders as this is largely dependent on personal preference. Optimally, the binding and strap should fit snug for maximum performance and allow minimal movement, yet still provide a level of comfort that can be ridden for extended periods.



ADJUSTING THE GRAB LINE

The grab line is attached to the nose of your jetboard and runs through the snorkel up to the hand control. The grab line provides balance and stability, especially when carrying out a heel-side carving turn, as well as avoiding putting undue tension on the throttle cable.

To fine-tune your riding position, the grab line can be shortened or lengthened by moving the bowline knot that connects the grab line to the v-cord on the hand control.

1. Untie the bowline knot that secures the grab line to the hand control v-cord. Adjust the grab line length according to your measurements and preferred riding position.

2. Re-attach the grab line using a bowline knot - form two loops of equal length in the grab line. Thread the tail of the grab line through the hand control v-cord. Thread the tail back under the hole created by the two loops. Move the tail from the back side of the loops to the front. Tuck the grab line behind the main line. Thread the tail back through the hole created by the two loops. Move the tail from the front side of the loops to the back.

NOTICE ***TO HELP NEW RIDERS LEARN HOW TO TRANSITION TO A STANDING POSITION, AND TO INCREASE THE ENJOYMENT OF USING YOUR JETBOARD, WE RECOMMEND THAT THE GRAB LINE IS SET SHORTER THAN NORMAL RIDING PREFERENCE. AS A GOOD STARTING POINT, SET THE GRAB LINE TO A TOTAL LENGTH OF 500MM.***

CHARGING THE BATTERY PACK

Your Mako Slingshot is supplied with a quick install battery pack which powers the electronic systems of the jetboard including the Engine Control Unit (ECU), starter and LED indicator.

1. BATTERY CAP
2. PULL HANDLE
3. BATTERY PACK
4. 4-PIN CONNECTOR
5. BATTERY HOUSING

Your battery will not be fully charged during shipping and should be given a full charge prior to first use. The first charge brings the battery to an operational state and may take up to 4 - 6 hours to complete.

DANGER ***ALWAYS FULLY REMOVE THE BATTERY FROM THE JETBOARD BEFORE CHARGING. ONLY USE THE CHARGER PROVIDED WITH YOUR JETBOARD. NEVER CHARGE THE BATTERY WHEN FUEL OR FUEL VAPOURS ARE PRESENT. DO NOT LEAVE UNATTENDED WHILE CHARGING. DISREGARDING THESE PRECAUTIONS COULD CAUSE SERIOUS INJURY INCLUDING THE POSSIBILITY OF DEATH!***

Proper charging is imperative to maximize battery performance. Both under- or over-charging batteries can significantly reduce the life of the battery. Charging time is approximately 1.5 hours, but will vary depending on depth o f discharge.

TOOLS REQUIRED : Mako Battery Charger

1. Select the plug type for the country or region you are located in. Match the grooves on the back of the interchangeable adapter over the top of the metal contacts on the main body of the wall charger.

2. Slide the adapter, making sure the adapter's flanges slide into the slots of the main body of the wall charger, until it locks in place and is seated properly.

2. Slide the adapter, making sure the adapter's flanges slide into the slots of the main body of the wall charger, until it locks in place and is seated properly.

3. Connect the battery pack to the charger via the 4-pin connector and ensure the screw cap is securely tightened. Plug the wall charger into an electrical outlet and turn on.

4. The LED indicator located on the top surface of the charger illustrates the various stages of the battery charging process :

- **STANDBY:** Charger detects the connected battery and ensures the battery cells are in a safe temperature range. When complete the charging cycle will begin automatically.

- **PRE-CHARGE:** Charger checks cell voltages and adapts the charging current to the acceptance level of the battery. This prevents overheating until such time that cells are able to accept the full current. This function will lead to extended or shortened charging times depending on the state of the used battery.

- **RAPID-CHARGE:** Charger applies a constant current to the battery and keeps that current flowing until the predetermined voltage has been reached. Charging time depends on level of discharge and capacity of the battery, typically this stage takes up to 2.5 hours.

- **TRICKLE-CHARGE:** Charger switches to a constant voltage phase. The transition from constant current to constant voltage ensures maximum capacity is reached without risking damage to the battery. This phase of charging takes up to 45 minutes.

- **READY:** Once the charge current and voltage reach predetermined values, the charge cycle is complete. If the charger is left connected to the battery, a periodic top-up charge is applied to counteract battery self-discharge.

- **ERROR:** Possible sources of battery error may include temperature out of nominal range, a highly unbalanced pack, or one cell in the pack has low voltage. In the case of a battery error, please remove the battery pack from the charger and inspect it carefully for damage.

BATTERY SAFETY

WARNING FAILURE TO EXERCISE CAUTION AND COMPLY WITH THE FOLLOWING WARNINGS COULD RESULT IN PRODUCT MALFUNCTION, ELECTRICAL ISSUES, EXCESSIVE HEAT, FIRE AND ULTIMATELY INJURY AND PROPERTY DAMAGE.

» Never leave the charger and battery unattended during charging process. Do not leave battery charging for longer than 8 hours maximum.

» Always disconnect the battery after charging and remove charger from electrical outlet. Let the charger cool between charges. When disconnecting the battery charger, pull by the plug not by the cord, to avoid damage.

» Never attempt to dismantle the charger or use a damaged charger. Never charge a battery if the cable has been pinched or shorted.

» Never allow batteries or battery packs to come into contact with moisture at any time. Never attempt to charge damaged or wet battery packs.

» Always charge in a well-ventilated area. Never charge batteries in extremely hot or cold places or place in direct sunlight.

» Always end the charging process if the battery becomes hot to the touch or starts to change form during the charge process.

» Do not drop the battery packs. This can cause internal cell damage and render it useless. In these circumstances the battery is not viable for repair and should be disposed of responsibly.

BATTERY STORAGE

We recognise that extended absences are not always planned in advance, however if for any reason your battery packs are not going to be used for lengthy periods of time, it is advised to store the batteries after its full charge cycle. Before the battery pack is used again, recharge prior to use. It is good practise to follow these steps to extend the life of your battery packs. Do not store the battery packs connected to the charger or jetboard. Store in a cool and dry location, protected from the elements.

THE RIGHT FUEL

Your Mako Slingshot is powered by the Rotron XT100 2-stroke combustion engine that requires a mixture of unleaded petrol and engine oil. The quality of the petrol and oil is extremely important to the running, efficiency and life of the engine.

RECOMMENDED FUEL: When choosing a petrol to use, don't go with the cheap stuff. Always use a high-quality unleaded petrol with a RON octane rating of 92, a MON octane rating of 87 or a AKI (RON+MON)/2 octane rating of 91, or higher.

Fuel with a lower octane rating may increase engine temperatures, resulting in the risk of piston seizure and damage to the engine.

RECOMMENDED OIL: We also recommend that you use a high-quality fully synthetic 2-stroke oil, which is designed to deliver the highest levels of engine protection. Ensure the oil you choose meets the standards NMMA TC-W3, API TC, ISO-L-EGD or JASO FD/FC.

FUEL MIXING

Knowing the proper way to mix your fuel is the first step in keeping your jetboard running strong and long. Your Mako Slingshot runs on a 50:1 petrol and engine oil mixture. So what does 50:1 mean? It's simply 50 parts of fresh, unleaded petrol with 1 part of fully-synthetic 2-stroke oil.

This chart provides an easy to use reference for getting the fuel to oil ratio correct for your Rotron XT100 engine.

RATIO	50 to 1 (2%)
ML PER LITRE	20 Millilitres
ML PER 5 LITRE	100 Millilitres
FL.OZ. PER US GALLON	2.56 Fluid Ounces
ML PER US GALLON	75.72 Millilitres

WARNING FUEL IS EXTREMELY FLAMMABLE AND HIGHLY EXPLOSIVE UNDER CERTAIN CONDITIONS. ALWAYS WORK IN A WELL VENTILATED AREA. DO NOT SMOKE OR ALLOW OPEN FLAMES OR SPARKS IN THE VICINITY.

TOOLS REQUIRED : 1ltr Graduated Fuel Measuring Can/Bottle

1. Fill the measuring bottle with fresh unleaded fuel from a reputable petrol station, to the 1 litre marker located on the side of the bottle.

2. Locate the 50:1 ratio oil fill marker located on the side of the measuring bottle. Pour in your chosen 2-stoke oil until the combined liquid reaches the marker (20ml oil).

3. Replace the cap onto the measuring bottle and secure tightly. Shake vigorously by hand to ensure proper mixing of the oil with the fuel.

FUELING PROCEDURE

1. Orientate the jetboard so that the deck is facing upward. Ensure the board is placed on a secure surface, such as the floor using a towel or rug to protect the upper side of the board.

2. Locate the fuel cap on the lefthand side of the board and slowly unscrew the fuel cap counterclockwise. Clean the fuel cap and the area around it to ensure that no dirt falls into the tank.

CAUTION ***IN ORDER TO REDUCE THE RISK OF FUEL COMING IN DIRECT CONTACT WITH SKIN AND INHALING FUEL VAPOR, REMOVE THE FUEL CAP CAREFULLY SO AS TO ALLOW ANY PRESSURE BUILD UP IN THE TANK TO RELEASE SLOWLY.***

3. Carefully begin to fill the fuel tank. To prevent fuel back-flow, fill the tank slowly so the air can escape.

4. Do not overfill or top off the fuel tank. Fuel expands under increased temperatures and may overflow.

5. Replace the fuel tank cap and securely tighten in a clockwise direction. Always wipe off any fuel spillage from the hull of the jetboard.

FUEL STORAGE

It is recommended that you only mix sufficient fuel for your planned duration on the water. Always store your fuel mixture using an approved fuel container that has been specially designed to reduce spillage, evaporation or permeation. Fuel storage should never exceed two months and should not be stored in the board's fuel tank. When using fuel that has been stored for any amount of time, shake the mixture in the container before fueling your jetboard.

CARRYING YOUR BOARD

Any traditional surfer will know what a struggle it can be to carry a surfboard and tell you how knackering it can be just to get your board down to the water. It can put a real strain on the lower back setting the tone for a painful session which has had to be cut short.

Your Mako Slingshot was designed so that anyone can carry and transport the board with ease. No more insecure grip or struggle, just a stress free journey to the water with little effort needed even over longer distances.

CARRY HANDLES: Mako's recessed side handles make for effortless carrying, putting the weight over your centre of gravity so you don't have to compensate or lean awkwardly. Gone are burning forearms and numbing fatigue as you stretch to wrap fingertips around the rail. Just pick up the board and go.

GRAB HANDLES: Mako's conveniently placed grab handles offer an energy saving alternative for those remote areas where there is a hefty walk from the car. Clasp the handles with both hands and lift onto your back in an overhead motion, using the footstraps located at the nose end of the jetboard to take the weight of the Slingshot onto your shoulders. Use the grab handles to steady the board as you head out towards the shoreline.

BOARD BAG: Our Mako Board Bag makes taking your jetboard with you as easy as possible. It's made using toughened materials that can cope with sun, sea, sand and damage. It even has a foil lining to ensure your board stays cool in extreme temperatures. The ingenious carry system, with its padded backpack straps and rubber carry handles allow you to simply bag it up, throw it on your back or under your arm and you're free to find adventure. When you're not out exploring, it serves as the perfect storage unit, too.

PRE-SURF CHECKLIST

Before you kit up and hit the water, it is always good practice that you carry out a thorough inspection of your jetboard and all safety equipment.

This pre-surf checklist should only take you around 15 minutes to complete and will help to familiarise yourself with your jetboard and enable you to identify wear and tear or any potential mechanical issues while safely on the shoreline.

WARNING BEFORE UNDERTAKING THE REQUIRED PRE-SURF CHECKS PLEASE REMOVE THE ENGINE SHUT-OFF PIN FROM THE HAND CONTROL UNIT AND REMOVE THE BATTERY PACK FROM ITS HOUSING. DISREGARDING THESE PRECAUTIONS COULD RESULT IN SERIOUS INJURY.

- ☑ Ensure the side fins are attached to the board and locked in place with the flat foil orientated toward the centre of the board.
- ☑ Ensure the large centre fin is attached to the ride plate correctly and locked in place, with the fin rake sweeping toward the rear of the board.
- ☑ Inspect hull and fins for damage. Remove weeds, shells, debris or anything that could restrict the flow of water through the intake and damage the jet-drive propulsion unit.
- ☑ Fully charge the battery pack using the battery charger supplied.
- ☑ Ensure adequate fuel for your planned duration on the water. The XT100 engine requires a mixture of regular unleaded gasoline or equivalent, and 2-stroke oil in the ratio of 50:1
- ☑ Fill fuel tank slowly to avoid back-flow. Do not over fill or top off fuel tank. Check any leakages and wipe off fuel spillage from the hull of the jetboard.
- ☑ Check coolant hoses are in good condition and are securely connected to the engine and to the exhaust, using a slight pulling force.
- ☑ Check condition and correct connection of all Engine Control Unit (ECU) connectors.
- ☑ Check condition of the spark plug and ensure spark plug cap is secure and has a tight seal
- ☑ Ensure throttle trigger operates smoothly when depressing and releasing. Check cable is free from twists and clear of wear or damage. Ensure throttle arm, located on the carburettor, operates smoothly with a full range of movement from the idle pin through to the throttle stop.
- ☑ Check the basic carburettor settings in accordance with information outlined elsewhere in this Operator's Guide.
- ☑ Check foot straps for wear or damage. Adjust for a comfortable fit using the single-adjustment Velcro straps.
- ☑ Insert the battery pack into the battery housing located in the centre of the board. Ensure the battery pack is pushed securely onto the connector and that the screw cap is securely tightened.
- ☑ Check life jacket and protective clothing for excessive wear or damage. Ensure all straps and buckles are fastened and secure.

START YOUR ENGINE

Pre-checks done? Then grab your gear, pick up your jetboard and head down to the shoreline to begin engine preparations for an awesome ride.

ENGINE SHUT-OFF PIN

The engine shut-off pin is a safety device attached to the paracord wrist strap. Its purpose is to instantly switch off the engine by cutting off the ignition. By inserting the pin into the hand control unit, the ignition circuit is completed and allows the engine to be switched on. The engine shut-off pin must be securely attached to your wrist at all times during operation. Your riding stance will determine which wrist - this will be the same as your front foot. Orientate the attachment cord so that it is located underneath your wrist with plenty of slack available.

STARTING PROCEDURE

Orientate the jetboard so that the deck of the hull is facing upward. Ensure the board is placed on a stable surface and there is adequate space around the board.

Remove the engine compartment lid by pressing the three pop-latch buttons to provide visibility and convenient, direct access to the engine bay.

The engine starting procedure consists of two stages:

- **Engine Prime** - If your board has not been used for a lengthy period of time or you are starting a cold engine, you will find that you need to prime the engine with fuel.
- **Engine Check & Warm-Up** - In order to speed up the starting process in the water, we recommend performing an engine check and warm-up procedure onshore.

CAUTION OPERATION OF THE XT100 ENGINE OUT OF WATER FOR LONGER THAN 10 SECONDS CAN RESULT IN PERMANENT DAMAGE TO THE ENGINE AND EXHAUST SYSTEM. A WARRANTY CLAIM MAY BE DENIED THROUGH IMPROPER USE.

PRIMING THE ENGINE

1. Securely insert the engine shut-off pin into the bottom of the hand control unit.
2. Depress the engine START/STOP button once to crank the engine, while gently squeezing the trigger to full throttle. The LED indicator will be on. At the same time cover the carburettor air intake with your hand. This will help draw fuel into the engine.
3. If after 3 seconds the engine fails to start correctly, the Starter Protection is activated and the LED indicator will begin to flash rapidly. Wait ten seconds before attempt another start.
4. Remove your hand from the carburettor inlet as soon as the fuel begins to enter the carburettor inlet or immediately after the engine has started. Failure to remove your hand will result in the engine becoming flooded with fuel.

ENGINE CHECK AND WARM-UP

5. Squeeze and release the throttle trigger to begin warming up the engine. Ensure the trigger operates smoothly when depressing and releasing.
6. Ensure throttle arm, located on the carburettor, operates smoothly with a full range of movement from the idle pin through to the throttle stop.
7. Let the engine run at idle for 5-10 seconds before immediately switching off engine using the START/STOP button. Remove engine shut-off pin from the hand control unit.
8. Locate the engine compartment lid back onto the three locator pins. Press firmly on each of the pop-latch rings to secure the lid to the hull. To ensure a correct seal, make certain there is no movement in the lid.

POST-SURF CHECKLIST

After an awesome ride it's easy to forget the importance of post-ride care. It is always good practice that you carry out a thorough inspection and clean down of your jetboard before storage.

This post-surf checklist should only take you around 15 minutes to complete and will aid you in the regular ongoing care of your jetboard so that you can maximise its performance and keep it running at its best, for longer.

- ☑ Once you reach the shoreline, continue to run the engine with the nose elevated higher than the tail for 5 seconds while applying some throttle to expel excess water from the exhaust.
- ☑ Switch off the engine by depressing the START/STOP button on the hand control. Remove the engine shut-off pin from hand control unit. Pick up and carry the board onto shore.
- ☑ Remove the battery pack from its housing. Place the jetboard upright on its nose and in a secure position. Wait for any additional water to drain out from inside the hull through the specially designed drainage channels.
- ☑ Allow the engine to cool for about 15 minutes before cleaning the jetboard or carrying out any maintenance.
- ☑ Replace the battery pack back into its housing. Place the jetboard flat on the ground with the nose elevated. Connect a fresh water supply to cooling outlet on right-hand side of the jetboard using the engine flush adaptor provided. Start the engine and immediately turn on the water supply. Run the engine for 90 seconds at idle speed. Close off the water supply, run the engine for a further 5 seconds, then stop the engine immediately.
- ☑ When the jetboard is used in salt or foul water, additional care should be taken to protect your Mako and its components. Rinse the jetboard hull, engine compartment and jet-drive inlet and nozzle with fresh water. Do not use a high pressure washer. Avoid water entering the carburettor air intake.

NOTICE TO REMOVE EXCESS FUEL OR TRAPPED WATER FROM ENGINE, REMOVE THE SHUT-OFF PIN FROM HAND CONTROL. UNSCREW AND REMOVE SPARK PLUG. THEN PRESS AND HOLD START/STOP BUTTON ON HAND CONTROL FOR 10 SECONDS TO CRANK ENGINE AND EXPEL FLUID.

- ☑ Respect the environment and other watercraft users by ensuring fuel, oil or cleaning solutions do not drain into the waterways. Refuse, even biodegradable, should be disposed of properly.
- ☑ Remove battery pack from its housing. Allow jetboard to dry out completely before spraying the engine compartment, battery housing terminals and jet-drive thoroughly with a penetrating oil such as WD-40, to help protect components against rust, corrosion and moisture.
- ☑ Ensure that the battery screw cap is replaced and securely tightened. Charge the battery pack using the battery charger supplied.
- ☑ Remove both side fins and centre fin by pulling the fin towards the nose of the board with an upwards force to release the fin from the box. Release the centre fin by sliding the front pin back through the square aperture.
- ☑ Place jetboard inside board bag for safe transport and storage. Do not store with engine compartment closed or in direct sunlight.

POST-SURF ENGINE FLUSH

When your jetboard is used in salt or foul water, additional care should be taken as part of your post-surf routine to protect the XT100 engine, exhaust and its components.

This post-surf engine flush should only take you around 5-10 minutes to complete and requires the engine flush connector found in your Mako toolkit, and access to a standard outdoor garden hose pipe.

1. Ensure the board is placed on a secure surface, with the nose elevated higher than the tail to ensure excess water drains from the exhaust outlet and does not seep back into the engine compartment.

2. Allow the engine to cool for few minutes before performing the post-surf engine flush.

3. Ensure a battery pack is plugged into the battery housing located in the centre of the board.

4. Locate the black coloured T-connector positioned near the spark plug. Remove the cooling pipe that connects to the exhaust by pushing it inward towards the inlet. Depress the blue release collar and gently pull out the pipe.

5. Connect the Engine Flush Adaptor supplied in the tool kit to your garden hose by means of a universal quick connector. Connect the hose to a clean water supply.

6. Connect the other end of the Engine Flush Adaptor to T-connector by inserting the nozzle into the blue release collar, ensuring a tight seal.

7. Start the engine using the procedure outlined elsewhere in this Operator's Guide. Immediately turn on the water supply. Run the engine for 90 seconds, alternating between idle and mid-throttle.

8. Check that a continuous flow of water is coming out from the cooling outlet on the right side of jetboard. Stop engine immediately if flow of water is not apparent.

! CAUTION WATER FROM THE COOLING OUTLET MAY BECOME INCREASINGLY HOT DURING LONG PERIODS OF OPERATION AND CAN RESULT IN SERIOUS INJURY. WHERE POSSIBLE, AVOID CONTACT DURING OPERATION.

9. Shut off water supply and let the engine run for a further 10 seconds. To aid removal of water from the exhaust system, elevate the nose of the board to allow the water to flow towards the rear of the board and through to the cooling outlet.

10. After 10 seconds immediately switch off the engine using the START/STOP button. Remove the engine shut-off pin from the hand control unit.

11. Reconnect the cooling pipe by pushing it gently into the T-connector, ensuring a tight and secure fit.

MAKO SLINGSHOT JETBOARD

OPERATOR'S GUIDE

Riding Your Mako

OPERATING RULES

Operating your Mako jetboard can be compared with driving a car on unmarked roads. Laws, rules, regulations and enforcement have been developed around the world to ensure safe and proper operation of all watercraft.

It is the responsibility of the owner and/or rider to familiarise himself or herself with all applicable ordinances on the body of water upon which the jetboard power board will be operated.

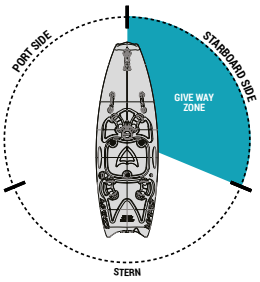
CAUTION ***MAKO BOARDSPORTS CANNOT ANTICIPATE EVERY CIRCUMSTANCE THAT CAN OCCUR IN OPERATING YOUR JETBOARD. THE INFORMATION PROVIDED IS GENERAL IN NATURE AND MAY NOT APPLY TO THE LOCATION IN WHICH YOU WILL BE OPERATING THE BOARD. ALWAYS PERFORM DUE DILIGENCE IN PREPARATION AND PLANNING FOR ALL OUTINGS, WITH PARTICULAR ATTENTION TO DOING SO IN THE SAFEST MANNER POSSIBLE.***

Always use common sense when encountering other watercraft. The Mako jetboard is considered to be a powered watercraft and will be expected to give-way to non-powered watercraft that has less manoeuvrability. Generally keep to your right and safely avoid collisions by keeping a safe distance from other watercraft, people and objects.

RIGHT OF WAY

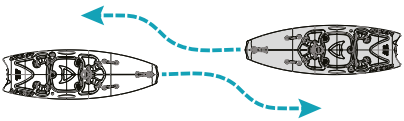
Give the right of way to watercraft ahead of you and to your right. You and your jetboard either stand-on course because you have the right-of-way, or you give way to a watercraft and let it pass first. The action you take depends on what you and the other vessel are doing.

NOTICE **SAILBOATS UNDER SAIL POWER ONLY ARE ALWAYS THE STAND-ON VESSELS IN CROSSING AND MEETING SITUATIONS, SO LOOK OUT FOR THEM WHEN YOU'RE UNDER POWER. ALSO, COMMERCIAL VESSELS RESTRICTED BY THEIR DRAFT OR BY FISHING GEAR, SUCH AS NETS OR TRAWLS, HOLD PRIVILEGE OVER ALL RECREATIONAL VESSELS, INCLUDING SAILBOATS.**



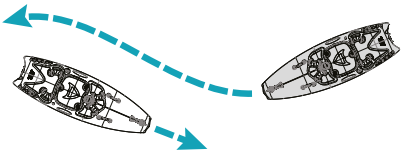
MEETING HEAD-ON

When meeting another watercraft head-on with the risk of collision, neither has right of way. Both watercraft must alter course to avoid an accident. Both you and the other watercraft should both steer to the right to such a degree that each can see the other's intentions and to pass safely keeping the approaching watercraft to your left or port side. This rule does not apply if both watercraft will be clear of each other if you continue on your set course and speed.



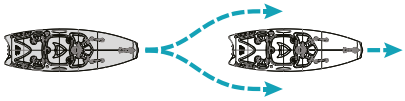
CROSSING

If you and another watercraft are crossing paths close enough to risk a collision and the other watercraft is visible on your right or starboard side, you must yield or stay out of its way. Alternatively, if the watercraft is visible on your left or port side, you must maintain course and speed until you have safely passed the other watercraft.



OVERTAKING

You are overtaking if you are approaching another vessel anywhere in a 135 degree sector at its rear or stern. When overtaking another watercraft, you are the give-way vessel, meaning you have the greater burden of responsibility should anything go wrong when you try to pass. Your watercraft, in this case, is also called the burdened vessel. The other watercraft is expected to maintain course and speed. Keep well clear of the other watercraft as you pass. When being passed by another watercraft, maintain speed and direction so that the passing watercraft can clear.



WHEN ALL ELSE FAILS

When it seems like no one but you know or follow the rules, the rules say you must give way to avoid a collision. If you exercise stand-on privilege and take evasive action by turning to the right or starboard, and an accident results, you'll be held at least partially responsible.

AIDS TO NAVIGATION

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

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

RIDER AWARENESS

Collisions result in more injuries and deaths than any other type of accident for personal watercraft. **TO AVOID COLLISIONS: BE OBSERVANT** and keep a constant lookout for people, objects and other watercraft, especially when undertaking turns. Be alert for conditions that may limit your visibility or block your vision of others.

RIDE DEFENSIVELY at safe speeds and keep a safe distance away from people, objects and other watercraft. Do not follow directly behind other watercraft. Do not spray or splash others with water. Do not wake or wave jump, ride the surf line or attempt to spray or splash others with your jetboard.

Your jetboard has the capability of turning more sharply than other watercraft, however, unless in an emergency, do not negotiate sharp, high speed turns. Such manoeuvres make it hard for others to avoid you or understand your direction of travel and can lead to you being thrown from the jetboard.

TAKE EARLY ACTION to avoid collisions. Remember, the jetboard and other boats are not fitted with brakes. **DO NOT RELEASE THROTTLE WHEN TRYING TO STEER** away from obstructions - you need throttle to steer.

RESPECT THE RIGHTS OF OTHER WATER USERS and/or bystanders and always keep a safe distance from all other watercraft, people and objects.

YOUR FIRST RIDE

NOTICE BEFORE STARTING YOUR MAKO JETBOARD IN THE WATER, MAKE SURE YOUR CHOSEN TRAJECTORY IS CLEAR OF PEOPLE, OBSTACLES AND OTHER WATERCRAFT. ENSURE AMPLE SPACE AT REAR OF BOARD. ATTACH ENGINE SHUT-OFF PIN TO WRIST USING THE PARACORD STRAP ENSURING THE PIN CORD IS ORIENTATED UNDERNEATH THE RIDER'S WRIST.

In order to speed up the starting process, we recommend performing the pre-surf checklist and engine priming and warm-up procedures onshore before carrying your jetboard into the water.

The starting procedure in the water is very similar to that undertaken out of the water, however you need to ensure you understand the correct technique to be able to mount the board from a standing position and ride after starting the engine.

CAUTION ALWAYS KEEP ARMS, LEGS AND OTHER BODY PARTS AWAY FROM THE JET INLETS AND OUTLETS DURING OPERATION. LONG HAIR, LOOSE CLOTHING AND STRAPS CAN BECOME ENTANGLED IN MOVING PARTS AND RESULT IN SERIOUS INJURY. WATER (AND DEBRIS) EJECTED FROM THE BOARD IS TRAVELLING AT A HIGH VELOCITY AND CAN ALSO CAUSE INJURY TO THE RIDER.

SHALLOW WATER START

For a shallow water start it is necessary to find a suitable place from which to embark on your ride. Ensure there is at least 60 cm (2 ft) of water underneath the lowest rear portion of the hull. Be certain to maintain the specified depth so sand, pebbles and rocks will not be drawn up into the propulsion system and you are able to avoid damaging the bottom fins. Take into account that after starting the engine, the rear of the jetboard may submerge into the water by 10-20 cm.

1. Standing on the lefthand side of your jetboard, take a firm grip of the grab handles with both hands and allow your forearms to rest on the the traction pads. Your riding stance (regular or goofy) will determine with which hand to grip the hand control unit.
2. Re-insert the engine shut-off pin into hand control unit and depress the engine START/STOP button to crank engine while applying two thirds throttle. Release button immediately after the engine has started. Do not hold button more than 3 seconds to avoid starter damage.
3. As the engine fires up the jetboard will instantly accelerate forward pulling you along by your arms. Using the grab handles, pull your body up onto the jetboard into a prone position, keeping centred on the board with elbows on the traction pads directly beneath your shoulders.
4. Check that a continuous flow of water is coming out from the cooling outlet on the right side of jetboard. Stop engine immediately if flow of water is not apparent.

THROTTLE CONTROL

Once the board reaches plane and you are in a stable position, you should take the opportunity to become acquainted with the throttle.

To increase or maintain speed, pull on the throttle trigger with your finger. To decrease speed, gently release the throttle trigger. The throttle trigger is spring loaded and should return to idle position when not pressed. Practice stopping the jetboard in a straight line at different speeds.

Avoid erratic throttle trigger movements, instead aim for smooth and consistent trigger operation. After a long period of full-throttle operation, allow the engine to run at a lower speed so that the heat in the engine can dissipate.

WEIGHT-SHIFT TURNS

Turning your jetboard is all about weight placement. Depending on which direction you want to go, you will focus your weight on the inside right or left of the board. For example, if you want to go left, lean your hips towards the left side of the board and apply your body weight through your left elbow. The opposite is true if you go right.

STANDING UP

First things first: decide which of your feet will be placed at the front of the jetboard and which will be placed at the rear. If you've participated in other boardsports, you may already know your stance.

If you can't decide which feels more comfortable, check out our simple test in the 'Setup Your Board' section of this Operator's Guide.

The excitement of standing up and carving across the water can only be described as the 'ultimate feeling.' The pop up is the move that will take you from a lying or kneeling position on your jetboard smoothly to an upright position on your feet. The move is really important in the development of your Mako experience; getting to your feet as quickly and smoothly as possible is what it is all about. Making sure that you are quickly up and have the correct foot position is essential. Popping up will become second nature to you soon, but you'll need a bit of practice to really nail it - so don't become discouraged.

CAUTION BEFORE ATTEMPTING ANY MANOEUVRE WITH YOUR MAKO JETBOARD, MAKE SURE YOUR CHOSEN TRAJECTORY IS CLEAR OF PEOPLE, OBSTACLES AND OTHER WATERCRAFT.

POPPING UP

1. Ensure you are confident in the use of the throttle trigger. Increase the acceleration of the jetboard until you have reached sufficient speed to rise out of the water and plane over the surface without drag. Despite a remarkable feeling of lightness and flight, the jetboard will feel sure-footed and stable. Keep throttle position constant while popping up.

2. While lying on your jetboard, take firm grip of the grab handles with both hands. Lift up your chest using your hands and pull both legs underneath you into a kneeling position in the centre of the engine lid.

NOTICE TRY NOT LOOK DOWN AT THE JETBOARD OR YOUR LEGS - INSTEAD REMAIN LOOKING IN THE DIRECTION OF TRAVEL AND DON'T MOVE YOUR HEAD. LOOKING DOWN OR BEHIND YOU CAN MAKE YOU APPREHENSIVE OR CAUSE YOU TO BECOME UNBALANCED.

3. Slide your back foot towards the rear of the jetboard, twisting your body around to the desired angle, and place into the correct foot strap position making sure to keep your front foot and lower leg resting on the jetboard.

4. When your back foot is firmly planted in a comfortable position, push up to a crouched position. Quickly slide your front foot underneath you and place it into the correct foot strap position at the front of the jetboard.

5. With your feet securely in the foot straps, start by raising your chest upwards while keeping your knees bent. Release your front hand from the grab handle.

6. Once your chest is vertical, drive your body upwards and extend your legs to a standing position in a continuous movement, releasing your other hand from the grab handle.

7. You are now in the perfect riding position - upright, arms at your side, your knees slightly bent and your eyes looking at the big picture, not the end of your board. Shoulders should both be parallel to your stance and your body weight must be balanced over the centre part of your foot's arch, with your head and hips centred too.

BASIC TURNS

So you're regularly getting to your feet and riding straight without any major problems. Well then, it's time to start doing some turns!

For a jetboard to turn one rail or the other needs to start cutting into the water - hence the term 'carving'. You've probably done the odd turn by accident due to your weight not being central, therefore applying pressure more on one side of the board than the other, thus 'engaging' the rail and causing you to veer off course.

The concept is fairly simple: we want to pressure the nose at the beginning of each carve, and pressure the tail at the end of each carve, shifting weight gradually back throughout the carve.

THE NEED FOR SPEED

Speed is a prerequisite to carrying out a turn. When you're riding a bike, the faster you're going the easier it is to turn. If you try to turn whilst travelling very slowly you'll probably come a cropper. The same laws of physics apply to turning your jetboard; you need to generate some velocity to transform your board from an immovable object into an unstoppable force. Without speed you'll bog. With increased speed, the more radically you'll be able to turn.

HEELS AND TOES

To make a turn you have to transfer body weight through either your heels or toes - depending on which way you want to turn - which will apply pressure to one side of the board more than the other, thus engaging the rail. We refer to these turns as either heelside or toeside.

We've heard the difference between the two explained like this: think of your heelside as being similar to the heel of your palm – powerful, but not necessarily the most nimble. The toeside turn is more dexterous, like your fingers, and can make more 'precise' turns than heelside.

TOESIDE TURN

With a toeside turn, you want to initiate the turn by shifting weight onto your front foot, onto the toes and ball of your foot. It's important not to let your nose sink. If you've got too much weight on the front foot as you turn your rail will catch, or bog. So a quick dab of weight on the back foot just before you turn is usually a good tactic.

Once you've set your line you can then re-apply pressure to the front foot and accelerate through your turn. Play around with the pressure on your toes. As you apply more pressure you carve at a sharper angle and vice-versa. Take some pressure off of your toes and knees and straighten your body to slow your turn.

As you reach the apex of the turn, your weight should be centered over both feet, knees and waist bent, creating an athletic powerful stance. At this time the board is up on it rail, engaged in a carve.

As you ride out of the apex, shift your weight to your back foot before transfering the pressure from your toes back towards your heels, to come out of your toeside turn.

HEELSIDE TURN

Maintaining a similar, athletic stance, keep your head and shoulders pointed in the direction of the turn, and use your ankles to transition to your heelside rail. You can stand a little taller during this transition.

Keep your weight forward during the initiation and use the tension in the grab line to provide additional stability. Then balance your weight between your front and back feet as you reach the apex of the turn. Spread your knees outward a bit to create a powerful stance.

To complete the turn, shift your weight slightly onto your back foot and the tail, and then transition back towards an upright position.

DEEP WATER START

At some time or another you will come off your jetboard in deeper waters - it's inevitable! This is typically no big deal and can even be part of the fun. However, there is a method to getting back onto your board.

If your jetboard has become capsized in the water, it is imperative that you right your board as soon as possible to avoid the ingestion of water into the hull and engine. Ensure the engine shut-off pin is not located in the hand control unit when up-righting the board to its correct orientation. When the jetboard is returned to its normal operating position, the engine can be started as normal.

NOTICE **BEFORE STARTING YOUR MAKO JETBOARD IN THE WATER, MAKE SURE YOUR CHOSEN TRAJECTORY IS CLEAR OF PEOPLE, OBSTACLES AND OTHER WATERCRAFT. ENSURE AMPLE SPACE AT REAR OF BOARD. DO NOT ATTEMPT TO CRANK THE ENGINE MORE THAN 3 TIMES. IF ENGINE FAILS TO START, RETURN TO A DRY AREA BEFORE DIAGNOSING THE ISSUE.**

1. Locate the hand control unit and ensure that the grab line and throttle cable are free of twists and clear of damage. Ensure the throttle trigger operates smoothly when depressing and releasing.

2. Orientate your body so that it is located on the lefthand side of your jetboard. Assume a prone position and take a firm grip of the grab handles with both hands with your forearms resting on the the traction pads.

3. Re-insert the engine shut-off pin into hand control unit and depress the engine START/ STOP button to crank engine while applying two thirds throttle. Release button immediately after the engine has started. Do not hold button more than 3 seconds to avoid starter damage.

4. As you squeeze the throttle trigger the jetboard will accelerate forward pulling you along by your arms. Using the grab handles, pull your body up onto the jetboard into a prone position with elbows on the traction pads directly beneath your shoulders.

5. Lift up your chest using your hands and pull both legs underneath you into a kneeling position in the centre of the engine lid.

6. Check that a continuous flow of water is coming out from the cooling outlet on the right side of jetboard. Stop engine immediately if flow of water is not apparent.

CAUTION **WATER FROM THE COOLING OUTLET MAY BECOME INCREASINGLY HOT DURING LONG PERIODS OF OPERATION AND CAN RESULT IN SERIOUS INJURY. WHERE POSSIBLE, AVOID CONTACT DURING OPERATION AND ALLOW ENGINE TO COOL BEFORE RE-MOUNTING THE BOARD.**

7. Once the board reaches plane and you are in a stable position, you can transition from a kneeling to a standing position on the board.

8. Alternatively, less confident riders can remain in the prone position with their elbows on the traction pads directly beneath your shoulders.

HINTS & TIPS

FLAT WATER OLLIE

If you haven't spent a lot of time riding around on your jetboard, go back to the 'Exercises' outlined in this Operator's Guide and work on everything covered there. If you have spent some time getting comfortable with your board, it is time to learn to ollie!

Even though the Ollie is nothing more than a simple hop, this trick is essential for everything that follows.

CAUTION BEFORE ATTEMPTING ANY MANOEUVRE WITH YOUR MAKO JETBOARD, MAKE SURE YOUR CHOSEN TRAJECTORY IS CLEAR OF PEOPLE, OBSTACLES AND OTHER WATERCRAFT.

1. The key to the Ollie is an ability to 'pop', also known as load and explode, or pushing down then pulling up. The most important part of learning how to Ollie then, or learning almost any trick for that matter, is bending your knees. When you're ready to attempt an Ollie, bend both knees simultaneously. The more you bend your knees, the higher you will pop.

2. In one continuous motion, slam your back foot down on the tail of your jetboard as hard as you can. At that moment, you want to also jump into the air, off of your back foot. Make sure to pull that back foot high into the air. This part is key and takes practice. It's a quick, snapping motion. Getting your timing right is not easy. It will take many attempts.

3. As you jump into the air, your front foot pulls the jetboard higher into the air with you, and helps guide the board to where you want it. This can be tricky to figure out, so just take your time and relax. The first few times you try and Ollie, it helps to not worry about this part. You will end up doing a sort of half-ollie, popping just a little in the air. Or, you might fall! But, don't worry, this is all part of learning. Just take your time!

4. When you jump, pull your knees as high as you can. Try to hit your chest with your knees. The deeper you crouch down before the Ollie, and the higher you pull your feet, the higher your Ollie will be. Try and keep your shoulders and body level, as in don't lean toward the tail or nose of your jetboard too much. This will make the whole Ollie easier, and it will make it easier to land on your board.

5. At the apex of your jump, when you are as high in the air as you will go, you want to flatten out the jetboard underneath you so that it almost becomes level. You should now already be looking at your landing spot.

6. Once you have locked onto your landing spot, avoid pointing the nose of your board downward, as this can lead to some pretty nasty spills. Instead, focus on keeping your knees bent and setting your tail down. Bending your knees will help absorb the shock of landing, it will keep you from getting hurt from the impact, and keep you in control of your board..

7. Finally, just apply some throttle and power away. If this sounds simple, then great - get out there and practice! If this sounds too complicated, don't worry. Just go slow, and take your time. With practice, you'll eventually get it.

WAVE JUMPING

You're feeling pretty comfortable riding the board and popping a few Ollies, but let's face it, you want to step up your game and get some air time. So how hard could it be? You're just supposed to ride up to the wave as fast as you can and jump as hard as you can off the top, right? Well, not exactly.

You'll want to start off small. Preferably a place with no rocks and not too shallow. Do a couple of slow jumps and feel things out. Once you get your speed dialled in you'll be able to hit the wave with the correct technique and get the best jump possible.

1. Select a wave that has a reasonably steep face, that isn't broken or just at that point of breaking. Line yourself up and aim to hit the wave at a ninety degree angle.

2. Slowly begin your approach, letting the wave come to you. Increase your speed as you get closer - your approach should be progressive. As you approach, your first instinct will be to try and jump from the lip - it does seem logical to give an extra kick from the top of the ramp. But in reality, getting big air happens a few moments before you even hit the wave.

3. Notice there is a small dip that leads right into the wave face. When you are at the very bottom of this dip straighten up. This will help absorb all of the speed that the wave has to offer. As you meet the face and start to ascend, that's when you give it power. If you get it right, the nose of the board will ride up the face and will continue in that line off the crest, giving it a good angle in the air. Just relax and let the board do the work.

4. Once you have left the wave, pull your knees upward toward your chest to maximise the height of your jump. Now, at this point, a lot of people will throw an arm out to try and balance themselves in mid-air.

5. At the height of your jump, you should already be locked into your landing. Land with the rear end of your board first. This breaks the surface tension of the water and greatly reduces impact when landing.

6. Keeping your knees slightly bent, your landing should be one fluid motion and there should be very little impact regardless of the wave size. As you ride away, maintain the same course for a few moments. This will ensure that you don't catch the rail or fall prematurely.

USING YOUR OWN WAKE

Traditional surfers always say there's nothing more depressing than staring at the charts to see zero surf forecast for the foreseeable future. For you and your jetboard, this is problem pales into insignificance.

Some of the greatest jetboarding can be found inland, on flat lakes and waterways. The benefit of your jetboard is that you can pull outrageous, frothing 180s at tremendous pace, arcing the board round and launching back into your own wake in a great flurry of spray and adrenaline.

You can find local waterways that have a lot of traffic such as motorboats or other similar vessels. Be mindful and never jump too close to them. It's best to only jump the wakes of boats that give you permission, otherwise it can be seen as rude and dangerous. If you have a friend with a boat, have them take it out with you and ask your friends on the boat to film you wake jumping for posterity.

WARNING THE INFORMATION PROVIDED ABOVE IS GENERAL IN NATURE AND MAY NOT APPLY TO THE LOCATION IN WHICH YOU WILL BE OPERATING THE JETBOARD. IT IS THE RESPONSIBILITY OF THE OWNER AND/OR OPERATOR TO REGULARLY REVIEW THE LEGAL AND SAFETY INFORMATION PROVIDED BY GOVERNMENTAL AGENCIES AND LOCAL JURISDICTIONS. GOOD COMMON SENSE SHOULD GUIDE OWNERS/OPERATORS AT ALL TIMES. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR EVEN DEATH.

HOW TO BAIL SAFELY

You should do everything you can to avoid separating from your jetboard, but sometimes, you just got to bail and cut a ride short safely and fluidly. Remember, as soon as you bail, you lose the control of your board. The universal rule is to never bail with someone directly behind you. This can lead to entanglement, a damaged board or far worse, serious injury.

- Fall off to the side or rear of the jetboard. Use your last bit of balance to push and jump away from the board. Keep your arm extended towards it so you can push it away if it bounces back towards you.

- The best way to enter the water is on your rear-end like you're doing a cannon ball. By having your legs bent you minimise the chances of ankle injury. There are other ways to hit the water, but whatever you do DO NOT GO HEAD FIRST!!! If your head hits something you might black out, so make sure it isn't leading the charge.

» Cover your head and face with your arms. Hold your breath and get ready to remain underwater for a few seconds; While underwater, use your arms and hands to protect you from any possible impacts;

LOSS OF POWER - PADDLING

Despite your jetboard's fast blinking LED indicator light telling you that you are quickly running out of juice, it is easy to get so immersed in having fun that you end up running out of battery life halfway through your ride.

Therefore, learning the correct paddling technique is critical to ensure you get back to shore as quickly and safely as possible, without completely draining your body's energy supply. If you want to paddle efficiently, there's two things you have to do:

1. Minimize Resistance (or drag). This is done by having the correct positioning on your jetboard.
2. Maximise Propulsion. You will do this by having the proper paddling technique.

To minimise resistance, you basically need to have the right position on the jetboard. It's about finding the 'sweet spot' on your board - being at the right place, both vertically and horizontally. The spot where your chest lays down on the jetboard, and how your body weight is distributed on the board will make the difference between creating tons of drag, or gliding on the water efficiently.

» Keep relaxed. When you're paddling, don't tense up and get all stressed. Relax the shoulders and keep everything loose. Keep your head up, back arched and feet together. Focus on deep breaths and timing, and keep your mind on the objective.

» Head Still. This may seem a bit simple, but it makes a profound impact on speed and efficiency in the water. When you sway your head and it moves off the vertical axis of your body, something on the other side of your body moves the opposite way. Your head moves left, your feet will move right. This increases your lateral profile, making more drag. We don't want this! Instead, keep the head still and rotate your body around an imaginary metal rod going down your body from head to tailbone. This is a key technique in maintaining lateral balance, and thus reducing drag.

» Hand position. Just relax the hand and it tends to create a slight finger gap. If you keep your fingers together, it feels unnatural - like you have to try to keep them like that. If you spread them correctly, it can improve your velocity up to 20-40 percent.

Maximising propulsion is done with the correct paddling technique and is about getting the most power out of every paddle stroke. The goal is to maximise the surface area (hand, forearm & arm) that pushes water underneath the board. The greater surface area reach, the more water you push, and the faster you paddle.

» The catch. Extend your arm, open your torso and focus on a determined, deep stroke, with full physical commitment. Keep your elbow high when your hand is about to enter the water. This is the best way to make sure your forearm stays vertical once it goes underwater. When your hand and forearm go deep underwater and stay vertical, you are able to hold a greater surface area and propel yourself forward with more power. Timing is also critical. Make sure your non-paddling arm is not causing drag.

» Feel the water. Yes, that's right. You need to feel the pressure of the water against your hand from the time it enters to the time it leaves the water. The more you feel it, the harder it is on your arms but the faster you will go. Your arms should be close to the jetboard's rails, not going wide on each side. You'll notice that your hip will be almost touching your hand by the end of each stroke.

DOCK/BOAT START

When it comes to riding your Mako jetboard in the early season or those colder climates, there's one thing that can seriously hinder your motivation: water temperature. When it's still too cold to swim, why would anyone go jetboarding? Well, if you've mastered the dock/bathing platform start, then temperature isn't so much of an issue...

NOTICE BEFORE STARTING YOUR MAKO JETBOARD IN THE WATER, MAKE SURE YOUR CHOSEN TRAJECTORY IS CLEAR OF PEOPLE, OBSTACLES AND OTHER WATERCRAFT. ENSURE AMPLE SPACE AT REAR OF BOARD. ATTACH ENGINE SHUT-OFF PIN TO WRIST USING THE PARACORD STRAP ENSURING THE PIN CORD IS ORIENTATED UNDERNEATH THE RIDER'S WRIST.

1. Keeping a firm hold of your jetboard, place the board into the water parallel to the dock or bathing platform. Your riding stance (regular or goofy) will determine the orientation of the board and the desired direction of travel.

2. Sit down on the dock or bathing platform so that your knees are located at the edge and equal to, or slightly lower than, your hips.

3. Slide your back foot towards the rear of the jetboard, and place into the correct foot strap position. When your back foot is firmly planted in a comfortable position, slide your other foot into the correct foot strap position at the front of the jetboard.

4. With your feet securely in the foot straps, place the hand control unit in the same hand as your leading foot and closest to the front of the board. Re-insert the engine shut-off pin into hand control unit. Keeping your arm bent, line the hand control up with your leading hip, while applying tension to the grab line.

5. Twisting your body around to the correct angle, move your front foot forward to slightly orientate the front of the board away from the dock or bathing platform and towards the desired direction of travel.

6. Depress the engine START/STOP button to crank engine while applying two thirds throttle. Release button immediately after the engine has started. Do not hold button more than 3 seconds to avoid starter damage.

7. As the engine fires up, transfer some of your bodyweight onto the front of the board. Look straight ahead.

8. As the jetboard instantly accelerates start pushing your hips forward and raising your chest upwards, while keeping your knees bent. Drive your body upwards and extend your legs to a standing position in a smooth continuous movement, straightening your arm and using the tension in the grab line to help gain more stability.

9. As you transition to a standing position, ensure your bodyweight is orientated towards the rear of the board to avoid 'pearling' where the nose of your jetboard digs under the water.

10. You are upright, still dry and in the perfect riding position - arms at your side, your knees slightly bent and your eyes looking at the big picture, not the end of your board. Shoulders should both be parallel to your stance and your body weight must be balanced over the centre part of your foot's arch, with your head and hips centred too.

11. Check that a continuous flow of water is coming out from the cooling outlet on the right side of jetboard. Stop engine immediately if flow of water is not apparent.

RACING START

NOTICE **BEFORE STARTING YOUR MAKO JETBOARD IN THE WATER, MAKE SURE YOUR CHOSEN TRAJECTORY IS CLEAR OF PEOPLE, OBSTACLES AND OTHER WATERCRAFT. ENSURE AMPLE SPACE AT REAR OF BOARD. ATTACH ENGINE SHUT-OFF PIN TO WRIST USING THE PARACORD STRAP ENSURING THE PIN CORD IS ORIENTATED UNDERNEATH THE RIDER'S WRIST.**

In order to speed up the starting process, we recommend performing the pre-surf checklist and engine priming and warm-up procedures onshore before carrying your jetboard into the water.

CAUTION **ALWAYS KEEP ARMS, LEGS AND OTHER BODY PARTS AWAY FROM THE JET INLETS AND OUTLETS DURING OPERATION. LONG HAIR, LOOSE CLOTHING AND STRAPS CAN BECOME ENTANGLED IN MOVING PARTS AND RESULT IN SERIOUS INJURY. WATER (AND DEBRIS) EJECTED FROM THE BOARD IS TRAVELLING AT A HIGH VELOCITY AND CAN ALSO CAUSE INJURY TO THE RIDER.**

RACING START IN SHALLOW WATER

For a racing start in shallow water it is necessary to find a suitable place from which to embark on your ride. Ensure there is at least 60 cm (2 ft) of water underneath the lowest rear portion of the hull. Be certain to maintain the specified depth so sand, pebbles and rocks will not be drawn up into the propulsion system and you are able to avoid damaging the bottom fins. Take into account that after starting the engine, the rear of the jetboard may submerge into the water by 10-20 cm.

1. Standing next your jetboard, take firm grip of the grab handles with both hands. Your riding stance (regular or goofy) will determine which side of the body the board is located and in which hand to grip the hand control unit.

3. Re-insert the engine shut-off pin into hand control unit and raise your dominant leg onto the jetboard, placing your foot into the correct foot strap position at the rear of the board.

4. When your back foot is firmly planted in a comfortable position, depress the engine START/STOP button to crank engine while applying two thirds throttle. Release button immediately after the engine has started. Do not hold button more than 3 seconds to avoid starter damage. Instantly apply the power by squeezing the throttle trigger.

NOTICE **WHILE SQUEEZING THE THROTTLE TRIGGER, THE BOARD WILL NATURALLY ACCELERATE FORWARD CAUSING YOU TO TWIST. TO AVOID LOSS OF BALANCE AND POSSIBLE INJURY, ENSURE A STABLE FOOT POSITION TO BRACE YOURSELF AGAINST WHEN STARTING THE ENGINE AND SQUEEZING THE THROTTLE.**

5. As the board accelerates forward, transfer your bodyweight onto the leg placed at the rear of the board, while raising the trailing leg and quickly sliding your front foot underneath you and placing it into the correct foot strap position at the front of the board. Ensure your bodyweight is orientated towards the rear of the board to avoid 'pearling' where the nose of your jetboard digs under the water.

6. With your feet securely in the foot straps, start by raising your chest upwards while keeping your knees bent. Release your front hand from the grab handle.

7. Once your chest is vertical, drive your body upwards and extend your legs to a standing position in a continuous movement, releasing your other hand from the grab handle.

8. Check that a continuous flow of water is coming out from the cooling outlet on the right side of jetboard. Stop engine immediately if flow of water is not apparent.

STORAGE & TRANSPORT

SHORT-TERM STORAGE

For short-term storage, for example stowing the board between riding sessions, it is recommended to carry out the Post-Surf Checklist in this Operator's Guide. Please pay close attention to ::

- Ensure your jetboard hull has been drained of any water and has time to dry out.
- You have allowed the time for the engine to cool. We recommend waiting for at least 15 minutes before storing.
- You have removed the battery pack from its housing.
- You have rinsed the hull, engine compartment and jet-drive with fresh water and sprayed engine compartment, battery housing terminals and jet-drive thoroughly with a penetrating oil such as WD-40.

After completing the Post-Surf Checklist, store your jetboard in a dry place, out of direct sunlight and with the engine compartment lid off.

LONG-TERM STORAGE

If you do not plan on using your jetboard for a lengthy period of time, it is advised to undergo a more vigorous procedure before committing your Mako to storage. These will aid you in the ongoing care of your jetboard so that you can maximise its performance and keep it running at its best, for longer.

- Never store your jetboard with fuel in the tank. Remove all fuel from the tank and fuel lines. Store excess fuel using an approved fuel container Fuel storage should never exceed two months.
- Flush the engine with a fresh water supply using the adaptor provided in the tool kit. refer to the 'Post-Surf Engine Flush' section of this Operator's Guide.
- Remove the battery pack from its housing. Store batteries only after its full charge cycle. Before the battery pack is used again, recharge prior to use.
- Every six months, spray the engine parts and battery terminals with a penetrating oil such as WD-40 to help protect components from rust, corrosion and moisture.
- To keep the freewheel in good shape, regularly check and top up the level of oil in the freewheel housing. Failure to maintain an adequate oil level can lead to seizure and serious engine damage.

TRANSPORT YOUR BOARD

Before transporting your jetboard ensure all fuel has been drained from the fuel tank. Transporting fuel can be dangerous and may be illegal in some jurisdictions. Remove the centre and side fins and store inside the board bag. The board needs to be completely dry inside and out to preserve the life of the components.

BY AIR: If you plan to take your jetboard abroad, you are required to follow the restrictions and regulations for your chosen airline. It is not acceptable to take any fuel on-board an aircraft. This will require venting the fuel tank overnight before a thorough clean with water and any suitable detergent until all traces of fuel are removed. Ensure your jetboard is transported in the board bag provided and covered by multiple protective layers to reduce the risk of damage when being loaded, stored and unloaded from the aircraft hold.

FOR SERVICING: Where possible it is a good idea to retain the original packaging for shipment of the jetboard. When returning your jetboard for servicing or any other issues, place the jetboard into the board bag provided and cover with multiple protective layers before placing into packaging to reduce the risk of damage. Enclose a note containing your *full name and address, serial number, returns reference number and brief reason for return of board.* Do not return unnecessary items such as fins, charger, batteries unless damaged or faulty.

MAKO SLINGSHOT JETBOARD

OPERATOR'S GUIDE

Jetboard Maintenance

MAINTENANCE SCHEDULE

A COMPLETE SERVICE INSPECTION IS HIGHLY RECOMMENDED EVERY 12 MONTHS

COMPONENT	OPERATION	PRE-SURF	POST SURF	25 HOURS	50 HOURS	100 HOURS	STORAGE/TRANSPORT	PAGE NO.
SPARK PLUG	CHECK / CLEAN	☑						
	REPLACE			☑	☑	☑		
SPARK PLUG CAP	DISCONNECT						☑	
FUEL LINE	CHECK / CONNECT	☑						
	REPLACE					☑		
CARBURETTOR	CHECK SETTINGS	☑						
	CHECK / CLEAN				☑			
	REPLACE MEMBRANES					☑		
	CHECK REED VALVE			☑				
	REPLACE REED VALVE					☑		
THROTTLE TRIGGER / ARM	CHECK FULL & FREE MOVEMENT	☑						
HOSES / CONNECTORS	CHECK / SECURE	☑						
	REPLACE					☑		
XT100 ENGINE	CHECK / SECURE MOUNTS	☑					☑	
	REPLACE MOUNTS					☑		
	CHECK / SECURE ECU CONNECTORS	☑						
	CHECK FOR OIL & FUEL LEAKS	☑	☑				☑	
	FRESH WATER ENGINE FLUSH		☑				☑	
	FRESH WATER CLEAN / WD40 SPRAY		☑				☑	
	REPLACE PISTON CROWN & RINGS				☑			
	REPLACE RINGS & END BEARINGS					☑		
	REPLACE HEAD & BASE GASKETS					☑		
	CHECK BORE SURFACE				☑			
	DECOKE CYLINDER & CROWN				☑			
	CHANGE FREEWHEEL OIL			☑				
	REPLACE BEARING CARRIER					☑		

A COMPLETE SERVICE INSPECTION IS HIGHLY RECOMMENDED EVERY 12 MONTHS

COMPONENT	OPERATION	PRE-SURF	POST SURF	25 HOURS	50 HOURS	100 HOURS	STORAGE/TRANSPORT	PAGE NO.
ENGINE COMPARTMENT LID	CHECK POP-LATCH BUTTONS	☑						
	CHECK LID SEAL	☑						
	REPLACE LID SEAL					☑		
JET-DRIVE PROPULSION UNIT	CHECK / CLEAN INLET & NOZZLE	☑						
	CHECK IMPELLER	☑						
	CHECK BEARINGS FOR WATER INGRESS				☑			
	REPLACE BEARINGS & SEALS					☑		
EXHAUST SYSTEM	CHECK EXHAUST OUTLET	☑						
	CHECK SEAL, SPRING & BALL			☑				
	REPLACE SEAL, SPRING & BALL					☑		
QUICK-RELEASE BATTERY	FULLY CHARGE	☑					☑	
	CONNECT	☑						
	DISCONNECT / REMOVE		☑				☑	
	WD40 SPRAY - CONNECTORS		☑				☑	
FOOT STRAPS	CHECK / ADJUST	☑						
IGNITION SYSTEM	CHECK ECU UNIT CONNECTORS	☑						
	CHECK ENGINE START PROCEDURE	☑		☑	☑	☑		
	CHECK SHUT-OFF PIN FUNCTION	☑		☑	☑	☑		

CAUTION **PROPER MAINTENANCE IS THE OWNER'S RESPONSIBILITY. FAILURE TO PROPERLY MAINTAIN AND SERVICE YOUR JETBOARD ACCORDING TO THE RECOMMENDED MAINTENANCE SCHEDULE AND PROCEDURES CAN MAKE IT UNSAFE TO OPERATE, AND A WARRANTY CLAIM MAY BE DENIED IF, AMONG OTHER THINGS, THE OWNER CAUSED THE PROBLEM THROUGH IMPROPER MAINTENANCE OR USE.**

Maintenance is very important for keeping your jetboard in a safe operating condition. A repair shop or person of the owner's choosing may maintain, replace, or repair the jetboard. Although an authorised Mako Agent has an in-depth technical knowledge and tools to service your jetboard, the warranty is not conditioned on the use of an authorised Mako Agent or any other establishment with which Mako Boardsports has a commercial relationship. Unauthorised service, repair or modification may result in a warranty claim being denied.

BASIC MAINTENANCE

Although Mako Boardsports uses the highest quality materials and craftsmanship in the production of its jetboard, it is your responsibility as the owner to maintain and service the jetboard to ensure that you can maximise its performance and keep it running at its best, for longer.

Failure to properly maintain and service your jetboard in accordance to the recommended maintenance schedule and procedures may result in premature damage to your jetboard, making it unsafe to operate and a warranty claim being denied. Please read and undertake the Pre-Surf and Post-Surf procedures described within this Operator's Guide every time you ride the jetboard.

WARNING BEFORE UNDERTAKING ANY OF THE REQUIRED MAINTENANCE PROCEDURES PLEASE REMOVE THE ENGINE SHUT-OFF PIN FROM THE HAND CONTROL UNIT AND REMOVE THE BATTERY PACK FROM ITS HOUSING. CHECK THE ENGINE HAS BEEN ALLOWED TO COOL AND IS NOT HOT TO THE TOUCH. DISREGARDING THESE PRECAUTIONS COULD CAUSE DAMAGE TO THE JETBOARD OR RESULT IN SERIOUS INJURY.

SPARK PLUG

The Rotron XT100 engine uses the NGK BPM8Y spark plug. The use of any other type of spark plug may result in poor performance, premature engine damage and a warranty claim being denied.

Although alternative spark plugs are available in the marketplace and may claim to be an equivalent replacement for the NGK BPM8Y spark plug, Mako Boardsports strongly recommends the sole use of NGK branded spark plugs.

In order to ensure correct engine operation, the spark plug must be placed correctly between the electrodes and must be kept clean. The spark plug must be checked as part of the Pre-Surf Checklist outlined in this Operator's Guide, and replaced after 25 hours of operation as outlined in the Maintenance Schedule.

SPARK PLUG REMOVAL

TOOLS REQUIRED : 19mm (3/4") Mako Spanner

1. With adequate force, remove the spark plug cap to expose the insulator and terminal nut of the spark plug.
2. Place the Mako spanner over the hex nut of the spark plug. Exert some pressure while turning the spanner in an anti-clockwise direction. Don't be afraid to use some strength, but do it in an even, controlled manner.
3. When the spark plug turns freely, finish the job by removing the Mako spanner from the hex nut and turning it by hand until the plug is free from the cylinder head.

SPARK PLUG CHECKS

TOOLS REQUIRED : Feeler Gauge Set

1. Visually inspect the spark plug for wear or damage. If the insulator is highly worn or if you can see any scratches or cracks then the spark plug will need to be replaced.

2. Visually inspect the electrode. In general, a light tan colour tells you that the spark plug is operating at optimum temperature and that the engine is in good condition. Dark colouring, such as heavy black wet or dry deposits, can indicate an overly rich condition. Alternatively, a lean condition will result in the plug being extremely dry and there will be a white texture on the insulator tip giving it a glazed or glossy appearance. In these cases you will need to reset the default carburettor settings, referenced elsewhere in this Operator's Guide.

3. Check the gap between the centre and side electrodes of the spark plug. If you are regapping a used plug, make sure that it's clean by gently scrub it with a wire brush. If you're using a new plug, it should be clean with the tip of the side electrode centred over the centre electrode.

4. Select the proper number on your feeler gauge, and run the gauge between the electrodes. For NGK BPM8Y this gap should be 0.7mm (.028"). If the gauge doesn't go through, or if it goes through too easily without touching the electrodes, you need to adjust the distance between the electrodes.

5. Adjust the gap as necessary. If the wire didn't go through, the gap is too narrow. Hook the part of the feeler gauge that's used for bending electrodes under the side electrode and tug very gently to widen the gap. If the gauge goes through too easily without touching the electrodes, the gap is wide. Press the side electrode very gently against a clean surface until it's slightly bent down toward the centre electrode.

6. Run the gauge through the gap again. You want the gauge to go through fairly easily, just catching the electrodes as it passes. If you keep adjusting the gap too narrow or too wide, don't feel bad. Most people go through the 'too large - too small - too large' bit a couple of times, especially the perfectionists.

SPARK PLUG INSTALLATION

TOOLS REQUIRED : 19mm (3/4") Mako Spanner

1. Prior to installation, ensure the contact surfaces of the cylinder head and spark plug are free of grime. Clean the spark plug hole in the cylinder block with a clean, lint-free cloth. Wipe away from the hole; don't push any dirt into it.

2. Carefully begin threading the spark plug into the cylinder head by hand to avoid the risk of starting the plug crooked and ruining the threads. Turn the spark plug by hand at least two full turns to ensure the plug is engaged correctly in the seat.

3. Place the Mako spanner over the hex nut and continue turning the plug clockwise until you meet resistance. Don't over-tighten the spark plug as you can crack the porcelain or damage the thread. Ensure a nice and tight fit with no wiggle. The recommended tightening torque for the NGK BPM8Y plug is 18-21.6 lb. ft.

4. Examine the spark plug cable before attaching its cap to the plug. If the cable appears cracked, brittle, or frayed or is saturated with oil, have it replaced. Push the spark plug cap over the exposed plug terminal and press it firmly into place. You will hear an audible click.

CARBURETTOR ADJUSTMENT

Replacement or repair of any emission related component must be executed in a manner that maintains emission levels within the prescribed certification standards.

The Rotron XT100 engine and Mako jetboard are certified to the United States Environmental Protection Agency (EPA) as conforming to the requirements of the regulations for the control of air pollution from new watercraft engines. This certification is contingent on certain adjustments being set to factory standards. This certification prohibits tampering, removal or rendering inoperative any device installed onto the engine in compliance

with EPA regulations prior to sale and delivery to, as well as after the sale to, the ultimate purchaser of the product.

Mako Agents are not to modify the engine in any manner that would alter the horsepower or allow emission levels to exceed their predetermined factory specifications.

NOTICE THE CARBURETTOR IS A VITAL PART OF THE ENGINE AND REQUIRES HIGHLY ACCURATE ADJUSTMENT. IF THE FACTORY CARBURETTOR SETTINGS ARE INTERFERED WITH BY A PERSON WITHOUT THE REQUIRED TECHNICAL KNOWLEDGE, IT CAN RESULT IN POOR OPERATIONAL PERFORMANCE AND MAY CAUSE SEVERE ENGINE DAMAGE.

The carburettor fitted to the Rotron XT100 engine has three basic adjusting screws:

1. High jet screw (Black)
2. Low jet screw (Red)
3. Idle screw

The high and low jet screws are typically tuned in minutes, where 60 minutes represents one whole turn or 360 degrees. Tuning these screws requires a high level of accuracy and should only be undertaken by an authorised Mako representative or Agent.

When you receive your Mako jetboard, the carburettor settings have already been optimised for responsive acceleration and peak performance, and therefore need no adjustment. Carburettor adjustment should only be carried out due to a new or rebuilt carburettor being fitted.

DEFAULT CARBURETTOR SETTINGS

1. Locate the black high-jet adjustment screw and gently turn it clockwise until the needle just touches the seat. Repeat process using the red low-jet adjustment screw.

NOTICE CARE MUST BE TAKEN WHEN TURNING THE HIGH AND LOW JET ADJUSTMENT SCREWS ONTO THEIR SEATS. THE SEATS CAN BE EASILY DAMAGED IF THE ADJUSTMENT SCREWS ARE SEATED TOO HARD. THE SEATS ARE DELICATE AND IF THEY BECOME DAMAGED DUE TO OVER TIGHTENING, THE CARBURETTOR HAS TO BE REPLACED.

2. Back out the black high-jet adjustment screw by turning the screw anti-clockwise 1 and 3/4 turns or 630 degrees (1 hour 45 minutes).

3. Back out the red low-jet adjustment screw by turning the screw anti-clockwise 1 and 1/4 turns or 450 degrees (1 hour 15 minutes).

FREEWHEEL LUBRICATION

The freewheel transmits power from the starter motor during the low speed engine cranking cycle. Once the engine fires, the freewheel permits the starter motor to be stationary and avoids backdrive from the engine causing serious damage to the starter.

We recommend that you use a high-quality hydraulic oil which is designed to deliver the highest levels of lubrication and protection. Ensure the oil you choose meets the HM Classification and with an ISO Viscosity Grade of 32.

TOOLS REQUIRED : 4mm Allen Key, Clean Lubrication Syringe, Lubrication Adaptor, Cloth and HM32 Hydraulic Oil

1. Place board on a secure surface. Start the engine using the procedure outlined in this Operator's Guide. Let the engine run for 10 seconds before switching off using the START/STOP button. Wait for 5 seconds before starting up the engine for another 10 seconds.

2. Remove engine shut-off pin from the hand control unit and unplug the battery pack from its housing. Leave for a couple of minutes to let the oil settle in the reservoir.

3. Remove the engine compartment lid by pressing the three pop-latch buttons to provide direct access to the engine bay.

4. Locate the blue anodised oil reservoir covering the freewheel, and gently turn it anti-clockwise until the two screws are located perpendicular to the engine.

5. Fold and place an oil catch cloth directly underneath the reservoir and the bottom drain screw. The cloth should be suitable to absorb or hold approximately 13ml of hydraulic oil.

6. Using the 4mm Allen key, remove the bottom drain screw and top bleed screw from the reservoir by turning them in an anti-clockwise direction. Allow the oil to drain out for approximately 10 minutes or until all the oil has been removed. Replace the bottom drain screw into the reservoir and securely tighten in a clockwise direction.

CAUTION CARE MUST BE TAKEN WHEN DRAINING THE HYDRAULIC OIL FROM THE RESERVOIR AS THE USED OIL MAY BE HOT AND CAN CAUSE SERIOUS INJURY. THE DRAINED HYDRAULIC OIL MUST BE DISPOSED OF IN AN APPROPRIATE MANNER.

7. Using a clean lubrication syringe, pull the plunger back to draw up air into the syringe. You should draw up 13ml of air, the same number of units of hydraulic oil required.

8. Pour out a small quantity of hydraulic oil into a container. Submerge the syringe tip into the hydraulic oil and inject the air into the oil. This helps you to draw up the oil easily from the container.

9. Draw up 13ml of hydraulic oil plus a couple of millilitres extra. Push the plunger back into the syringe until the required 13ml of oil remains in the syringe.

10. Screw the lubrication adaptor into the top bleed screw in a clockwise direction and then push the opposite end securely onto the syringe tip. Push the plunger into the syringe until 13ml of hydraulic oil has entered the reservoir.

11. Unscrew the adaptor, then using the Allen key replace the top bleed screw into the reservoir and tighten in a clockwise direction. Remove the oil catch cloth and wipe off any oil spillage from the engine and hull of the jetboard.

POST-SURF CLEAN DOWN

CAUTION REMOVE THE ENGINE SHUT-OFF PIN FROM THE HAND CONTROL UNIT AND REMOVE THE BATTERY PACK FROM ITS HOUSING. DISREGARDING THESE PRECAUTIONS COULD RESULT IN SERIOUS INJURY.

When your jetboard is used in salt or foul water, additional care should be taken to protect the jetboard hull, engine, jetdrive and its components.

Weeds, shells or debris can get caught in the intake, drive shaft and/or impeller. A clogged water intake may cause troubles such as:

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

TOOLS REQUIRED : Garden Hose Pipe, Microfiber Towel, WD-40 Oil Spray

1. Ensure the board is placed on a secure surface. Allow the engine to cool for about 15 minutes before performing the Post-Surf clean down.

2. Ensuring battery has been removed from the board then carefully remove weeds or debris from the water inlet, drive shaft and impeller.

3. Cover the carburettor's air intake with your hand to avoid water ingestion during cleaning.

4. Turn on the fresh water supply. Rinse thoroughly using plenty of fresh water allowing it to sheet off of the hull, engine and jetdrive. Never use a high pressure washer to clean your jetboard. High pressure can cause damage to electrical or mechanical systems.

5. Occasionally, wash the hull and various components with a water and soap solution using only mild detergent or a pH neutral bodywork shampoo. Avoid using anything that may damage the carbon fibre and metal or plastic components.

6. It is inevitable that the engine compartment will have collected some excess water. Carefully place your jetboard upright on its nose and wait for any additional water to drain out from inside.

7. You may wish to dry your board to avoid leaving water marks on the hull. It is best to proceed methodically and gently. Using a microfiber drying towel or chamois (well cared for!) gently wipe the surface dry using no pressure. You may also wish to pat the surface dry rather than wipe to minimise the chances of inflicting marring.

8. Once your jetboard has dried out, spray the engine, battery connectors and jetdrive thoroughly with a penetrating oil, such as WD-40, to help protect components against rust, corrosion and moisture.

NOTICE **RESPECT THE ENVIRONMENT BY ENSURING FUEL, OIL OR CLEANING SOLUTIONS DO NOT DRAIN INTO THE WATERWAYS.**

CARBON FIBRE HULL PROTECTION

After a long period of use, UV rays can effect the carbon fibre hull which manifest visually as faded and patchy in appearance, or even yellowing or in extreme circumstances, cracking - all of which are caused by UV rays penetrating and breaking down the resin within the board. To ensure longevity in the appearance and integrity of your jetboard, use a high quality Carbon UV Protector that will protect carbon fibre parts from UV rays, natural elements, salt and water. Failure to protect your jetboard could result in a warranty claim being denied.

DRAIN A FLODDED ENGINE

Although your jetboard is equipped with multiple bulkheads and systems to avoid water ingress, it can happen that some water gets into the engine compartment and floods the engine through the carburettor air intake or failure to drain your exhaust properly from your last surf/flush and stored the board in a nose down position.. Alternatively, you may find that you have flooded your engine with petrol which means that there's too much fuel and not enough air in the engine. This causes the spark plugs to become wet and as a result they won't be able to ignite.

In such cases it will be necessary to drain out as much liquid as you can and dry out your engine as soon as possible. Don't continually try to start the engine. If there's water in the engine, you'll just compound the damage.

TOOLS REQUIRED : 19mm (3/4") Mako Spanner, Cloth

1. Ensure the board is placed on a stable surface. With adequate force, remove the spark plug cap to expose the insulator and terminal nut of the spark plug.

2. Place the Mako spanner over the hex nut of the spark plug. Exert some pressure while turning the spanner in an anti-clockwise direction. Don't be afraid to use some strength, but do it in an even, controlled manner.

3. When the spark plug turns freely, finish the job by removing the Mako spanner from the hex nut and turning it by hand until the plug is free from the cylinder head. Check the spark plug insulator and electrode for moisture.

NOTICE A WET SPARK PLUG MEANS THAT IT HASN'T BEEN FIRING LIKELY DUE TO ENGINE FLOODED WITH FUEL OR A BAD IGNITION CABLE. WHITE OR MILKY RESIDUE ON THE SPARK PLUG MEANS THAT IT HASN'T BEEN FIRING LIKELY DUE TO ENGINE FLOODED WITH WATER.

4. Ensure a battery pack is plugged into the battery housing located in the centre of the board. Place a cloth underneath the spark plug hole to aid catchment of any expelled liquid.

5. *REMOVE* the engine shut-off pin from the hand control unit. With a firm grip of the board, depress the engine START/STOP button. At the same time cover the carburettor air intake with your hand. Hold the button for more than 5 seconds to engage the engine drain procedure.

6. The LED indicator light will begin to blink steadily to show that the engine drain procedure has been egaged. The engine will crank over and will draw any excess fluid from inside the carburettor into the engine.

7. Hold the engine START/STOP button for 5 seconds before removing your hand from the carburettor inlet. Release the START/STOP button to stop the engine drain procedure.

8. Place the jetboard on its right-hand rail edge, with the cylinder head pointing downward. This will allow the liquid to drain out through the spark plug hole.

9. Depress the engine START/STOP button. Hold the button for more than 5 seconds to re-engage the engine drain procedure.

10. The LED indicator light will begin to blink steadily to show that the engine drain procedure has been egaged. The engine will crank over and you will visually see any excess fuel or water ingression expelled from the cylinder through the spark plug hole.

CAUTION WATER EXPELLED FROM THE ENGINE MAY BE HOT DURING LONG PERIODS OF MAINTENANCE AND CAN RESULT IN SERIOUS INJURY. WHERE POSSIBLE, AVOID CONTACT DURING PROCEDURE.

11. Hold the engine START/STOP button for 15 seconds or until no further fuel or water is being expelled from the spark plug hole. Release the START/STOP button to stop the engine drain procedure. Wipe off any excess moisture from the spark plug hole using the cloth.

12. Using a dry spark plug, carefully begin threading the spark plug into the cylinder head by hand. Finish tighening the spark plug with the Mako spanner until you meet resistance. Don't over-tighten the spark plug as you can crack the porcelain or damage the thread. Ensure a nice and tight fit with no wiggle. Push the spark plug cap over the exposed plug terminal and press it firmly into place. You will hear an audible click.

13. Re-insert the engine shut-off pin into hand control unit. Depress the engine START/STOP button to crank engine while applying a little throttle. Release button immediately after the engine has started. Do not hold button more than 3 seconds to avoid starter damage.

14. If the engine fails to start, remove the engine shut-off pin from the hand control unit.

15. Repeat the engine drain procedure to remove any remaining liquid from the engine. This process might need to be repeated numerous time until the engine starts cleanly.

CAUTION IF THE ENGINE DOES NOT START AFTER 5 ENGINE DRAIN ATTEMPTS, DO NOT CONTINUE TO CRANK THE ENGINE. OTHERWISE, THE ENGINE COULD BE DAMAGED. CONTACT MAKO BOARDSPORTS OR AN AUTHORISED MAKO DEALER AS SOON AS POSSIBLE.

DRAIN FLODDED ENGINE BY HAND

While using your jetboard, it may become necessary to drain the engine of excess fuel or water ingression by hand, should you have a battery or ignition system issue. Don't continually try to start the engine. If there's water in the engine, you'll just compound the damage.

TOOLS REQUIRED : 19mm (3/4") Mako Spanner, Cloth, Clean Lubrication Syringe and Unleaded or 50:1 Mixed Fuel

1. Ensure the battery pack is unplugged from the battery housing located in the centre of the board.
2. Place the board on a stable surface. Remove the spark plug cap to expose the insulator and the terminal nut of the spark plug.
3. Place the Mako spanner over the hex nut of the spark plug. Exert some pressure while turning the spanner in an anti-clockwise direction. Don't be afraid to use some strength, but do it in an even, controlled manner.
4. When the spark plug turns freely, finish the job by turning it by hand until the plug is free from the cylinder head. Check the spark plug insulator and electrode for moisture.
5. Place the jetboard on its right-hand rail edge, with the cylinder head pointing downward. This will allow the liquid to drain out through the spark plug hole. Place a cloth underneath the hole to aid catchment of the expelled liquid.
6. Using the lubrication syringe, pull the plunger back to draw up air into the syringe. You should draw up 10ml of air, the same number of units required to inject into the carburettor.
7. Pour out a small quantity of 50:1 mixed fuel or unleaded petrol into a container. Submerge the syringe tip into the fuel and inject the air into the liquid. This helps you to draw up the fuel from the container.
8. Draw up 10ml of fuel plus a couple of millilitres extra. With the syringe still upright, push the plunger into the syringe until the required 10ml of fuel remains in the syringe.
9. Place the syringe tip into the air intake and push the plunger into the syringe until 10ml of fuel has entered the carburettor.
10. With a firm grip, grasp the drive coupling and rotate in an anti-clockwise direction. This in turn rotates the crank shaft, driving the piston up and down the crankshaft and expelling the fuel or water ingression from the cylinder through the spark plug hole.
11. Keep rotating the drive coupling until no further fuel or water is being expelled from the spark plug hole.

CAUTION IF YOU DO NOT PLAN ON REINSTALLING A CHARGED BATTERY PACK OR CARRYING OUT ANY REQUIRED REPAIR FOR A LENGTHY PERIOD OF TIME, IT IS ADVISED TO TRANSPORT OR STORE THE ENGINE CONTAINING ADEQUATE FUEL TO HELP PRESERVE KEY INTERNAL ENGINE COMPONENTS.

12. Orientate your jetboard so that the deck is facing upward. Carefully begin threading the spark plug back into the cylinder head by hand. Finish tighening the spark plug with the Mako spanner until you meet resistance. Don't over-tighten the spark plug as you can crack the porcelain or damage the thread. Ensure a nice and tight fit with no wiggle.
13. Using the lubrication syringe, repeat stages 6 through 10 until you have injected a further 150ml of fuel into the engine.
14. Repeat the engine drain procedure before carrying out any required maintenance or attempting to start the engine. Manually rotate the drive coupling to remove the excess fuel from the engine.

REMOVING THE ENGINE

During the ownership of your jetboard there will inevitably be times when you will want to disconnect and remove the XT100 engine from the hull.

The engine removal process should only take you between 5 and 10 minutes depending on experience, and will aid you in either routine maintenance, carrying out your own repairs or in sending the engine to a Mako representative for service or repair.

Failure to properly maintain and service your XT100 engine in accordance to the recommended maintenance schedule and procedures may result in premature damage to your engine, making it unsafe to operate and a warranty claim being denied.

WARNING BEFORE UNDERTAKING THE REMOVAL PROCEDURE CHECK THE ENGINE HAS BEEN ALLOWED TO COOL AND IS NOT HOT TO THE TOUCH. DISREGARDING THIS PRECAUTION COULD RESULT IN SERIOUS INJURY.

XT100 ENGINE REMOVAL

TOOLS REQUIRED : 3mm Allen Key, Wire Cutters, Ratcheting Socket Wrench, Extension Bar, 5mm Allen Key Bit and Needle-Nose Pliers

1. Remove engine shut-off pin from the hand control unit and unplug the battery pack from its housing.
2. Remove the engine compartment lid by pressing the three pop-latch buttons to provide direct access to the engine bay.
3. With adequate force, remove the spark plug cap to expose the insulator and terminal nut of the spark plug.
4. Using the 3mm Allen key, remove the screw securing the earth/ground wire to the starter motor bracket, located above the gear cover.
5. Disconnect the ignition pickup and start motor connectors. Hold the female connector in one hand and pull back on the locking tab to release it, while pulling the male connector from the female receiver. Make sure you are holding both plastic connectors and not the wires so as to avoid damage.
6. Locate the white coloured engine cooling inlets either side of the engine cylinder. Remove the silicone cooling pipe by pushing it inward towards the inlet. Depress the orange release collar and gently pull out the pipe.
7. Remove the silicone pipe from the exhaust cooling nozzle by gently cutting the cable ties with the wire cutters.
8. Using the 5mm Allen key, loosen off the retaining screw on the jetdrive coupling just enough to allow you to slide the driveshaft coupling away from the crankshaft coupling. Store the three rubber cushions in a safe place.
9. Using the ratcheting socket wrench, extension bar and 5mm Allen key bit, remove the 4 mounting screws that secure the blue anodised engine mounts to the floor of the hull.
10. With the engine now released from the hull, firmly grip the exhaust and with adequate force slide the engine horizontally towards the nose of the board to seperate the exhaust outlet.
11. Carefully rotate the engine upwards and towards the rear of the board, to expose the blue anodised oil reservoir. Be carefully not to put excessive strain on the throttle cable that is still attached to the engine.
12. Using the 5mm Allen key, remove the throttle cable from the clamp located on the engine spar below the gear cover. Next, remove the throttle socket from the throttle arm using the needle-nose pliers. Finally, carefully lift the engine out of the engine compartment. Store all the removed screws for later use

MAKO SLINGSHOT JETBOARD

OPERATOR'S GUIDE

Troubleshooting

TROUBLESHOOTING

As a general rule when troubleshooting your Mako jetboard, investigate the possible causes that can be eliminated easily and inexpensively before proceeding to those that require more time. Where possible, avoid component disassembly until you have exhausted all other investigative options. This practice will help avoid presenting an inflated repair for a simple problem.

WARNING IT IS THE OWNER'S RESPONSIBILITY TO ENSURE THAT THEY HAVE SUFFICIENT EXPERIENCE AND IS IN ANY DOUBT REGARDING THEIR ABILITY TO PERFORM THE REPAIR. FAILURE TO PROPERLY REPAIR AND SERVICE YOUR JETBOARD ACCORDING TO THE RECOMMENDED PROCEDURES CAN MAKE IT UNSAFE TO OPERATE, COULD CAUSE DAMAGE TO THE JETBOARD AND A WARRANTY CLAIM MAY BE DENIED IF, AMONG OTHER THINGS, THE OWNER CAUSED THE PROBLEM THROUGH IMPROPER REPAIR OR MAINTENANCE.

Even the best-maintained jetboard can run into trouble occasionally. General wear and tear will eventually take its toll. When it happens, your task is to pinpoint the source of trouble quickly and home in on the correct solution. To accomplish this, you'll need to follow our logical troubleshooting plan.

We'll come to the plan in a bit, but first you should consider your engine's history. What has been done to it recently? Or not been done to it, that should have been? Think hard about any service work that may have been performed. It's possible that something was overlooked or not done properly.

History is as important with engines as it is with the human body. One of the first things a doctor wants to know about you is your age. Why? Because the doctor knows that certain of your 'parts' are likely to wear out with age, and some sooner than others if you've abused them. Your engine is no different in this respect.

To understand how to best troubleshoot your jetboard and to have a clear plan of attack, you need to know how various systems function and what problems your jetboard is most prone to. Here's a list of the systems of failure:

- Ignition system
- Fuel system
- Cooling system
- Electrical system
- Exhaust system
- Hull Integrity

Details for solving problems in each of these general categories can be found in the following pages as well as in our highly-produced troubleshooting and maintenance tutorial videos available on the Mako Boardsports website and YouTube channel.

Each video shows an experience member of the Mako team walk you through each step of the process. The videos are fully narrated with additional explanation, and range between 1-3 minutes in length.

Visit the Mako website at MAKOBOARDSPORTS.COM

COMMON SYMPTOMS OF TROUBLE

Common symptoms of trouble can be placed into the following basic categories:

- Engine will not start
- Engine runs irregularly or stalls
- Engine idles unevenly
- Engine speed will not increase above idle
- Engine revs higher than normal
- Engine revs lover than normal
- Board speed is less than normal
- Board takes on more water than normal

Once you establish which of these symptoms describes your problem, consult the following step-by-step troubleshooting chart. Keep in mind the basic care and maintenance needs of your jetboard, and realise that many of the following symptoms are the direct result of those needs not being met.

ENGINE WILL NOT START

ISSUE	LED STATUS	PROBABLE CAUSES	PRIMARY ACTIONS	SECONDARY ACTIONS
ENGINE DOES NOT CRANK OR CRANKS SLOWLY	Slow Flash	Engine shut-off pin	Remove and re-insert engine shut-off pin.	Check for debris in rubber housing on hand control.
		Engine shut-off sensor	Check/test engine shut-off pin sensor with multimeter between pins 1 and 2.	Contact Mako Service Centre or your Mako representative.
	LED Off	LED Indicator	Check secondary red LED indictator located on the Engine Control Unit.	Contact Mako Service Centre or your Mako representative.
		Faulty, undercharged or flat battery	Check battery is seated and connected correctly. Check terminals for damage.	Charge battery pack with charger. Test voltage with multimeter. Replace battery.
		START/STOP button	Check/test START/STOP button with multimeter between pins 1 and 3.	Contact Mako Service Centre or your Mako representative.
	SOLID: 1sec FLASH: 10sec	Hydro-locked engine	Check spark plug for moisture. Drain engine procedure. Replace spark plug.	Contact Mako Service Centre or your Mako representative.
		Flooded exhaust	Remove battery. Place board upright on its tail. Rotate drive shaft manually to expel water ingression.	Contact Mako Service Centre or your Mako representative.
		Obstructed jetdrive	Remove battery. Check drive shaft rotates manually by hand.	Clean/clear debris from jetdrive.
		Starter motor	Remove battery. Check gears for damage or obstruction. Test starter motor by attaching directly to battery for no more than 3 seconds.	Replace Starter Motor.
	RAPID FLASH	Low Battery	Charge battery pack.	Contact Mako Service Centre or your Mako representative.
ENGINE CRANKS BUT DOES NOT FIRE	LED Off	LED Indicator	Check secondary red LED indictator located on the Engine Control Unit.	Contact Mako Service Centre or your Mako representative.
		Flywheel clutch	Check flywheel oil reservoir rotates at same RPM as drive coupling during engine cranking.	Contact Mako Service Centre or your Mako representative.
	SOLID: 1sec FLASH: 10sec	Ignition Sensor	Check ignition pickup connection. Check flywheel magnets.	Run engine drain procedure while checking LED flashes at engine RPM.
	SOLID: 3sec FLASH: 10sec	Fuel/air system	Prime engine. Check adequate fuel level. Check filter, breather and fuel lines for blockages or damage.	Check/clean carburettor and snorkle. Reset carburettor settings. Replace carburettor.
		Ignition system	Check spark plug type. Check spark plug for damage. Check spark plug gap. Replace spark plug.	Check HT lead for secure connection and damage. Check HT Coil earthing is secure. Check/re-connect ignition pickup.
		flooded engine	Remove battery. Place board on left-hand side, carb down. Rotate drive shaft manually to expel water/fuel.	Check spark plug for moisture. Drain engine procedure. Replace spark plug.
		Flooded exhaust	Remove battery. Place board upright on its tail. Rotate drive shaft manually to expel water ingression.	Contact Mako Service Centre or your Mako representative.

IF PROBLEM PERSISTS. CEASE ALL OPERATION. CONTACT MAKO BOARDSPORTS OR AN AUTHORISED MAKO AGENT AS SOON AS POSSIBLE.

ENGINE RUNNING

ISSUE	PROBABLE CAUSES	PRIMARY ACTIONS	SECONDARY ACTIONS
ENGINE IDLES OR RUNS IRREGULARLY, OR STALLS	Fuel system	Check adequate fuel level. Ensure correct 50:1 fuel mix. Check filter, breather and fuel lines for blockages or damage.	Replace with freshly mixed fuel. Reset carburettor settings. Check/clean carburettor. Replace carburettor. Check/clean reed valve. Replace reed valve.
	Defective or fouled spark plug	Check spark plug for damage. Check spark plug gap.	Replace spark plug.
	Faulty, undercharged or flat battery	Ensure LED indicator is illuminated. Charge battery pack.	Test voltage with multimeter. Replace battery pack.
	Ignition system	Check flywheel magnets. Check/re-connect ignition pickup. Check HT lead for damage. Check HT Coil earthing is secure.	Test ignition pickup and HT Coil with multimeter. Replace flywheel magnets Replace ignition pickup. Replace HT Coil pack. Replace HT lead.
	Engine Control Unit (ECU)	Ensure LED indicator is illuminated.	Unplug ECU and test voltage with multimeter. Replace ECU.
	Exhaust system	Check ball valve for blockage. Check ball valve for damage. Check ball valve seal intact. Check hoses for damage.	Check exhaust silencer. Replace ball valve. Replace exhaust silencer.
ENGINE SPEED WILL NOT INCREASE	Hand control unit / Throttle	Check throttle trigger operation. Check throttle cable for damage. Check throttle arm operation.	Adjust idle screw. Replace hand control unit / throttle assembly.
	Obstructed jetdrive	Remove battery. Check drive shaft rotates manually by hand.	Clean/clear debris from jetdrive.
	Fuel system	Check adequate fuel level. Ensure correct 50:1 fuel mix. Check filter, breather and fuel lines for blockages or damage.	Replace with freshly mixed fuel. Reset carburettor settings. Check/clean carburettor. Replace carburettor. Check/clean reed valve. Replace reed valve.
	Defective or fouled spark plug	Check spark plug for damage. Check spark plug gap.	Replace spark plug.
	Ignition system	Check flywheel magnets. Check/re-connect ignition pickup. Check HT lead for damage. Check HT Coil earthing is secure.	Test ignition pickup and HT Coil with multimeter. Replace flywheel magnets Replace ignition pickup. Replace HT Coil pack. Replace HT lead.
	Engine Control Unit (ECU)	Ensure LED indicator is illuminated.	Unplug ECU and test voltage with multimeter. Replace ECU.

IF PROBLEM PERSISTS. CEASE ALL OPERATION. CONTACT MAKO BOARDSPORTS OR AN AUTHORISED MAKO AGENT AS SOON AS POSSIBLE.

ISSUE	PROBABLE CAUSES	PRIMARY ACTIONS	SECONDARY ACTIONS
ENGINE SPEED RUNS HIGHER THAN NORMAL	Hand control unit / Throttle	Check throttle trigger operation. Check throttle cable for damage. Check throttle arm operation.	Adjust idle screw. Replace hand control unit / throttle assembly.
	Fuel system	Ensure correct 50:1 fuel mix. Check filter, breather and fuel lines for blockages or damage.	Replace with freshly mixed fuel. Reset carburettor settings. Check/clean carburettor. Replace carburettor.
	Jetdrive	Remove battery. Clean/clear debris from jetdrive. Check impeller for damage.	Replace impeller.
ENGINE SPEED RUNS LOWER THAN NORMAL	Hand control unit / Throttle	Check throttle trigger operation. Check throttle cable for damage. Check throttle arm operation.	Adjust idle screw. Replace hand control unit / throttle assembly.
	Obstructed jetdrive	Remove battery. Check drive shaft rotates manually by hand.	Clean/clear debris from jetdrive.
	Fuel system	Check adequate fuel level. Ensure correct 50:1 fuel mix. Check filter, breather and fuel lines for blockages or damage.	Replace with freshly mixed fuel. Reset carburettor settings. Check/clean carburettor. Replace carburettor. Check/clean reed valve. Replace reed valve.
	Defective or fouled spark plug	Check spark plug for damage. Check spark plug gap.	Replace spark plug.
	Ignition system	Check flywheel magnets. Check/re-connect ignition pickup. Check HT lead for damage. Check HT Coil earthing is secure.	Test ignition pickup and HT Coil with multimeter. Replace flywheel magnets Replace ignition pickup. Replace HT Coil pack. Replace HT lead.
	Engine Control Unit (ECU)	Ensure LED indicator is illuminated.	Unplug ECU and test voltage with multimeter. Replace ECU.
HULL TAKES ON MORE WATER THAN NORMAL	Engine Compartment Lid	Check lid seated correctly. Check pop-catches are secure. Check lid seal for wear damage.	Replace lid seals. Replace pop-catches.
	Jetdrive	Remove Battery. Check seals for damage.	Replace jetdrive seals.
	Hull	Check hull for damage.	Repair minor damage. Contact Mako representative.

IF PROBLEM PERSISTS. CEASE ALL OPERATION. CONTACT MAKO BOARDSPORTS OR AN AUTHORISED MAKO AGENT AS SOON AS POSSIBLE.

LED INDICATOR

Your jetboard features an LED status indicator light that is located above the battery housing, in the centre of the board. This indicator light provides run-time, error/warning and diagnostic information about your jetboard.

The table below outlines the course of signalling for each status of the LED indicator light. Should the primary LED status indicator light become faulty, a secondary red-coloured status light is located directly on the Engine Control Unit.

INDICATOR	ENGINE SHUT-OFF PIN	START/STOP BUTTON	LED STATUS	STATUS DEFINITION	TROUBLESHOOTING
	Y/N	N	DEFAULT / OFF	The jetboard is powered off and in its inactive configuration.	Faulty, undercharged or flat battery pack. Faulty Engine Control Unit. Unplugged ECU Connectors. Faulty LED or connection.
	Y	Y	SOLID / ON	The jetboard is powered on, ECU is functioning correctly and the starter is cranking the engine for three seconds.	The LED may appear to flash, this is due to engine rotation during starting, this is normal.
	N	Y	SLOW FLASHING FOR 3 SECONDS	The engine shut-off pin is not present or incorrectly located in the hand control unit.	Check for debris in rubber housing on hand control. Re-insert engine shut-off pin.
	Y	N	SOLID / ON	The jetboard is powered on and the engine is running correctly.	---
	Y	Y	RAPID FLASHING FOR 10 SECONDS	Engine failed to start correctly. Starter protection active. Wait ten seconds before attempting another start.	Check spark plug. Ensure engine is primed with fuel. Check jetdrive for obstruction. Ensure drive shaft rotates freely.
	N	Y	SLOW FLASHING AT ENGINE RPM	START/STOP button held for longer than 5 seconds. Engine drain procedure engaged. Engine cranking until START/STOP button released.	Ensure spark plug removed. Process can also be used to test ignition sensor is functioning correctly.
	Y	Y/N	RAPID FLASHING	The battery pack has 20% of its full charge capacity remaining. Return to dry land immediately.	Charge battery pack. Replace battery pack.

MAKO SLINGSHOT JETBOARD

OPERATOR'S GUIDE

Safety Information

INTRODUCTION

READ AND FOLLOW THIS OPERATOR'S GUIDE THOROUGHLY BEFORE USE. THIS GUIDE CONTAINS IMPORTANT SAFETY INFORMATION. DISREGARDING THESE PRECAUTIONS COULD CAUSE SERIOUS INJURY INCLUDING THE POSSIBILITY OF DEATH!

Safety is the primary concern for Mako Boardsports. Mako provides the following information in the expectation of long, safe and enjoyable ownership of your Mako Slingshot jetboard. If any of the information presented in this Operator's Guide is not clearly understood, contact one of our Mako Boardsports support representatives for clarification and further understanding prior to operating your jetboard.

The Safety information provided in this guide cannot anticipate every circumstance that may arise while maintaining and operating your jetboard. Basic safety information is provided, but it is not all-inclusive. Mako Boardsports strongly encourages all owners and operators to regularly review the relevant Maritime and Coast Guard Agency safety information, and other safety-minded, watercraft websites and authorities which apply to the relevant area or region under which the Mako jetboard will be operated.

SAFETY ALERTS & MESSAGES

This Operator's Guide utilises the following symbols and words to emphasise potential injury hazards and important information:

DANGER **DANGER** indicates an eminently hazardous situation which, if not avoided, could result in serious injury or death.

WARNING **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death.

CAUTION **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE **NOTICE** indicates an instruction which, if not followed, could result in damages to the jetboard that are not covered under warranty.

RIDER AWARENESS

DANGER ***IT IS THE RESPONSIBILITY OF THE OWNER AND/OR OPERATOR TO COMPLY WITH SAFETY-RELATED MATERIAL PROVIDED IN THIS OPERATOR'S GUIDE AND TO REGULARLY REVIEW SAFETY INFORMATION PROVIDED BY GOVERNMENTAL AGENCIES AND LOCAL JURISDICTIONS. GOOD COMMON SENSE SHOULD GUIDE OWNERS/OPERATORS AT ALL TIMES. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR EVEN DEATH.***

ALWAYS WEAR AN APPROVED LIFE JACKET (PFD)

WEAR PROTECTIVE CLOTHING TO AVOID SERIOUS INJURY

ALWAYS REMAIN OBSERVANT TO AVOID COLLISIONS

KEEP FUEL AWAY FROM OPEN FLAMES & SPARKS

DO NOT TRANSPORT WITH FUEL IN TANK

ALWAYS CLEAN AFTER USE TO AVOID DAMAGE

Collisions result in more injuries and deaths than any other type of accident for personal watercraft. **TO AVOID COLLISIONS: BE OBSERVANT** and scan constantly for people, objects and other watercraft.

RIDE DEFENSIVELY at safe speeds and keep a safe distance away from people, objects and other watercraft. Do not follow directly behind other watercraft. Do not spray or splash others with water. Avoid sharp turns or manoeuvres that inhibit others to avoid you or understand your direction of travel. Avoid areas with submerged objects or shallow water.

TAKE EARLY ACTION to avoid collisions. Remember, the jetboard and other boats are not fitted with brakes. **DO NOT RELEASE THROTTLE WHEN TRYING TO STEER** away from obstructions - you need throttle to steer.

RIDE WITHIN YOUR LIMITS and avoid aggresive manoeuvres to reduce the risk of loss of control, ejection or collision.

SAFETY MATTERS

CARBON MONOXIDE POISONING

CARBON MONOXIDE CAN BE EXTREMELY DIFFICULT TO DETECT AND CAN ACCUMULATE WITHOUT AWARENESS. EXPOSURE CAN BE FATAL IN A MATTER OF MINUTES. EFFECTS OF CARBON MONOXIDE ARE CUMULATIVE AND REPEATED EXPOSURE TO LOW AMOUNTS CAN HAVE A SIMILAR EFFECT AS TO A SINGLE HIGH CONCENTRATION EXPOSURE. CARBON MONOXIDE SHOULD BE AVOIDED, WHILE ANY EXPOSURE SHOULD BE TREATED IMMEDIATELY.

Carbon monoxide is a colourless, odourless, tasteless gas that may be present even if you do not see or smell any engine exhaust fumes. Deadly levels of carbon monoxide can collect rapidly, and you can quickly be overcome and unable to save yourself. Breathing carbon monoxide from the jetboard's exhaust system can cause headaches, dizziness, drowsiness, nausea, confusion and eventually death.

Deadly levels of carbon monoxide can linger for hours or days in enclosed or poorly ventilated areas. If you experience any symptoms of carbon monoxide poisoning, turn off the engine, leave the affected area, get as much fresh air as possible and seek medical treatment immediately.

To prevent serious injury or death from carbon monoxide:

- Never leave or run the jetboard in poorly ventilated or partially enclosed areas. Even if you try to ventilate exhaust fumes, carbon monoxide can rapidly reach dangerous levels.
- Never run the jetboard out of the water where exhaust fumes can be inhaled or drawn into a building or boat through openings such as windows and doors.
- Never stand behind the jetboard while the engine is running. Despite the exhaust ventilating into the water, a person standing behind a running engine may inhale high concentrations of exhaust fumes. Inhalation of concentrated exhaust fumes that contain carbon monoxide can result in CO poisoning, serious health problems and death.

FUEL SAFETY & PRECAUTIONS

FUEL IS EXTREMELY FLAMMABLE AND HIGHLY EXPLOSIVE UNDER CERTAIN CONDITIONS. ALWAYS WORK IN A WELL VENTILATED AREA. FUEL VAPORS CAN SPREAD AND BE IGNITED BY A SPARK OR FLAME MANY FEET AWAY FROM THE ENGINE.

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

- Use an approved fuel container to transport and store fuel that has been specially designed to reduce spillage, evaporation or permeation.
- Strictly adhere to the instructions outline in the Fueling Procedure section of this Operator's Guide. Always stop the engine and allow to cool before re-fuelling.
- Do not overfill or top off the fuel tank. Fuel expands as temperatures increase and may overflow.
- Never operate the jetboard if fuel or fuel vapor odor are present in the engine compartment. Always wipe off any fuel spillage from the jetboard.
- Do not store or transport your jetboard with any fuel remaining in the engine or fuel tank. This can also result in damage to your jetboard.
- Do not experiment with other fuels. Only use the fuel and oil recommended in this Operator's Guide. Engine or fuel system damage may occur with the use of inadequate fuel.

Fuel is poisonous and can cause injury or death.

- Never siphon fuel with your mouth.
- If you swallow fuel, get any in your eyes, or inhale fuel vapors, see a doctor immediately.
- If fuel gets spilled on you, wash thoroughly with soap and warm water and change your clothes.

MODIFICATIONS

Do not make unauthorised modifications, or use accessories that are not approved by Mako Boardsports. Since these changes have not been tested by our technicians, they may increase the risk of accidents or injuries, and they can make the jetboard illegal for use on water.

BURNS & MOVING PARTS

The Mako Slingshot is not a toy. The jetboard is intended solely for use as described in this Operator's Guide and the purpose envisaged for it on delivery. Any other use is considered improper use.

To prevent serious injury or death from incorrect use, follow these instructions:

- Riders should be at least sixteen (16) years old or the minimum age required within the jurisdiction in which the jetboard is operated. Minors should always be supervised by an adult whenever operating the jetboard.
- Touching any part of a running engine, in particular any component that is moving, can result in serious injury or death. If it is necessary to access or touch an engine for any reason the engine must be turned off and engine switch-off pin and battery pack removed.
- Certain components may become increasingly hot during operation and can result in skin burns if engine is not allowed to cool prior to touching it. Avoid contact during and shortly after operation.

HYPOTHERMIA

HYPOTHERMIA, WHEN THE BODY LOSES HEAT FASTER THAN IT CAN PRODUCE HEAT RESULTING IN SUBNORMAL BODY TEMPERATURES, IS A SIGNIFICANT CAUSE OF DEATH IN WATERCRAFT ACCIDENTS.

After an individual has succumbed to hypothermia, he or she will lose consciousness and then drown. Personal Flotation Devices (PFDs) can increase survival time because of the insulation they provide. Naturally, the warmer the water, the less insulation you will require. When operating in cold water (below 4°C (40°F)) consideration should be given to using a coat or jacket style PFD as they cover more body area than the vest style PFDs.

To help prevent and protect against hypothermia, follow these instructions:

- While afloat in the water, do not attempt to swim unless it is to reach a nearby watercraft, fellow survivor, or a floating object onto which you can lean or climb. Unnecessary swimming increases the rate of body heat loss.
- In cold water, drown-proof methods that require putting your head in the water are not recommended. Keep your head out of the water. This will greatly lessen heat loss and increase your survival time.
- Maintain a positive attitude about your survival and rescue. This will improve your chances of extending your survival time until you can be rescued. Your will to live does make a difference!
- If there is more than one person in the water, huddling together is recommended. This action tends to reduce the rate of heat loss and thus increase the survival time.
- Always wear your Personal Flotation Device. It won't help you fight off the effects of hypothermia if you don't have it on when you go into the water.

DRUGS & ALCOHOL

Never use with drugs or alcohol. Operating a jetboard requires the rider to be sober, attentive and alert. Operating a jetboard while intoxicated or under the influence of drugs is not only dangerous, but it is also a legal offense carrying a significant penalty. These laws are vigorously enforced. The use of drugs and alcohol, singularly or in combination, decreases reaction time, impedes judgment, impairs vision, and inhibits your ability to safely operate a jetboard.

JETBOARD REGISTRATION

In many jurisdictions, it will not be necessary to register your Mako jetboard within the country or region of principal use. However, because the jetboard is motorised, registration may be necessary. Verify with the relevant Coast Guard and/or Authority regulating the laws pertaining to the use of personal watercraft within the region in which the jetboard will be operated most, prior to using for the first time.

EXCESSIVE SPEED & NOISE

Respect applicable laws in regards to speed restrictions and noise pollution. Operators of our jetboard should respect the rights of other users of the waterways.

While your jetboard has the capacity of operating at high speeds, it is strongly recommended that high speed operation only be applied when ideal conditions exist and are permitted. Higher speed operation requires a higher degree of skill and increases the risk of severe injuries.

Verify with the relevant Coast Guard and/or Authority regulating the laws applicable to the waterways where you intend to use your jetboard.

LAW ENFORCEMENT

When underway, operators may be required to cease manoeuvres and allow Coast Guard or law enforcement personnel to come alongside. Some countries, regions and jurisdictions may require a minimum age to operate the jetboard, pass a training course, and/or possess an operator's license. Requirements vary widely. If operating in a location that allows minors, such activity should be done only under adult supervision.

ENVIRONMENTAL RESPONSIBILITY

The Coast Guard and/or relevant Authority which applies to the region where the jetboard is used provides detailed information regarding the disposal or refuse. In general, refuse, even biodegradable, should be disposed properly on-shore. The rider must ensure that any substances such as fuel, oil or cleaning solution do not drain into the waterways or surrounding area. The jetboard should be held in a state of good condition to avoid potential water contamination. Should the rider deduce a failure or damage the jetboard, operation should cease immediately until adequate repairs can be undertaken.

At no time should the jetboard owner and/or operator alter or modify the engine exhaust or fuel systems in any fashion. Doing so is both illegal and potentially dangerous.

ACCIDENTS & INSURANCE

In the majority of countries, law requires reporting of an accident to the local authority in which:

- A person is seriously injured or dies
- A person disappears from the watercraft in what appears to be a situation that could have resulted in death or serious injury
- Damage to a vessel and/or property that exceeds the amount stipulated by law. The total may be lower in some jurisdictions and it is the responsibility of the owner/operator to verify;
- The jetboard is destroyed.

Any instance in which other vessels or persons appear in distress, riders are required by law to offer assistance unless doing so would result in potential danger to the rider themselves. Good Samaritan protection is provided to anyone who offers good faith assistance.

Even when others operate the jetboard, the owner is generally responsible for damages or injuries that may occur. Owners must not allow any riders to operate the jetboard without prior instruction in correct use and operational risks. Owners are strongly encouraged to carry sufficient liability and property insurance to provide in anticipation of potential judgments in those instances. Theft and on-shore damage are additional reasons to purchase insurance.

SAFETY GEAR

It is expected that riders will, from time to time, fall off the jetboard, even in normal operation.

CAUTION AS THE OWNER OF THE JETBOARD, YOU ARE RESPONSIBLE FOR ASSURING THAT ALL RIDERS WEAR THE REQUIRED SAFETY GEAR. HARD IMPACT WITH THE WATER CAN RESULT IN LOSS OF CONSCIOUSNESS AND DROWNING.

PERSONAL FLOTATION DEVICE

Each rider using the jetboard must wear a Personal Flotation Device (PFD) suitable for personal watercraft use at all times. Check with the relevant Coast Guard and/or Authority regulating the laws applicable to the waterways where you intend to use your jetboard, to ensure your PFD is suitable.

A Personal Flotation Device provides buoyancy to help keep the head and face above the water, and to help maintain a satisfactory body position while in the water. Body weight and age should be considered when selecting a PFD. The buoyancy provided by the PFD should support your weight in water. Make sure that your PFD fits correctly so that it does not come off in the water. Never use an adult sized PFD for children.

It is your responsibility to ensure that you have the proper type and number of PFDs to comply with local regulations, and that other riders know where they are and how to use them.

Mako Boardsports recommends an approved type III vest-style PFD. These are suitable for most riders where there is a chance for a quick rescue. They offer freedom of movement, are the most comfortable and popular for those wearing them at all times. The type III PFD allows riders to place themselves in and maintain a vertical or slightly backward position, with no tendency to turn the rider face down.

RECOMMENDED CLOTHING

DANGER SEVERE INTERNAL INJURIES CAN OCCUR IF WATER IS FORCED INTO BODY CAVITIES AS A RESULT OF FALLING INTO WATER OR BEING NEAR THE JET-DRIVE NOZZLE. FAILURE TO WEAR PROTECTIVE GEAR COULD RESULT IN SERIOUS INJURY OR EVEN DEATH.

Normal swimwear does not adequately protect against falling in the water or forceful water entry into lower body cavities of males or females. All riders must wear a wet suit bottom, or thick tightly woven and snug fitting clothing that provides equivalent protection. As an example, thin swim shorts would not be appropriate.

Footwear, gloves, safety goggles or glasses are also recommended.

Lightweight, flexible foot protection will help reduce possible injury, should you step on sharp underwater objects such as shells or rocks. Riders should also have ready access to shatterproof glasses should riding conditions or personal preference warrant. Wind, water spray and speed may cause a person's eyes to water and create blurred vision, limiting your visibility and capability to avoid people, objects and other watercraft.

WARNING PERSONS IN RANGE OF THE JETBOARD SHOULD EXERCISE CAUTION TO AVOID HAVING LOOSE CLOTHING OR HAIR COME IN CONTACT WITH THE MOVING PARTS OF THE ENGINE AND JET-DRIVE. LACK OF CAUTION COULD RESULT IN SERIOUS INJURY.

Keep away from the jet-drive inlet and nozzle while the engine is running or the engine shut-off pin is inserted. Items such as long hair, loose clothing, or PFD straps can become entangled in moving parts. If the rider has long hair, it should be tied up or secured in some fashion so that the hair cannot become entangled in the engine's moving parts.

HELMETS

Helmets are designed to offer some degree of protection in case of impacts to the head. In most motorised sports, the benefits of wearing a helmet clearly outweigh the drawbacks. However, in the case of motorised watersports such as riding a jetboard, this is not necessarily true as there are some particular risks associated with the water.

THE BENEFITS: A helmet helps to reduce the risk of injury in case of a head impact against a hard surface such as another watercraft in the case of a collision. Similarly, a full face helmet with a chin guard might help prevent injuries to the face, jaw or teeth.

THE RISKS: On the other hand, in some situations when falling off the jetboard, helmets have a tendency to catch the water, like a "bucket", and can put severe stresses on the neck or spine. This could result in choking, severe or permanent neck or spine injury or death.

Helmets may also interfere with peripheral vision and hearing, or increase fatigue which, could contribute to increased risk of a collision.

RISKS vs BENEFITS: In order to decide whether or not you should wear a helmet, it is best to consider the particular environment you will be riding in, as well as other factors such as personal experience. Will there be a lot of traffic on the water? What is your riding style?

THE BOTTOM LINE: Since each option minimises some risks, but increases others, before each ride you must decide whether to wear or not wear a helmet based on your particular situation.

If you decide to wear a helmet, you must then decide what type is the most appropriate for the circumstances. Mako Boardsports recommend you look for helmets that meet the DOT or SNELL standards, and if possible, choose one designed for motorised watersports.

MOBILE PHONE

A mobile telephone in a waterproof bag has also been found to be beneficial to riders when in distress or just for contacting someone on shore.

GPS LOCATION DEVICE

For adventures that may take you beyond the boundaries of cellular networks, Mako Boardsports recommend a location-based messaging and emergency notification technology, such as a SPOT device, that allows you to communicate via GPS satellites from remote locations around the globe.

The device's onboard GPS chip determines your location and sends that information and a preselected message to communication satellites, which relay your message to specific satellite antennas around the world to the appropriate network. Your location and messages are delivered according to your instructions via email or text message. In emergency situations, users can send emergency SOS notification to GEOS International Emergency Response Coordination Center (IERCC) using the SOS button.

SAFE OPERATION

OBSERVE THE INSTRUCTIONS ON ALL SAFETY LABELS. THEY ARE THERE TO HELP ASSURE THAT YOU HAVE A FUN, SAFE AND ENJOYABLE JETBOARD RIDING EXPERIENCE. RIDE WITHIN YOUR LIMITS AND LEVEL OF RIDING ABILITY. ALWAYS RIDE RESPONSIBLY AND SAFELY. USE COMMON SENSE AND COURTESY. THE JETBOARD IS NOT DESIGNED FOR NIGHT TIME OPERATION.

Know the waters in which the jetboard is to be operated. Current, tides, rapids, hidden obstacles, wakes and waves can affect safe operation. Avoid riding in rough waters or inclement weather, or practicing extreme manoeuvres like jumping wakes or waves. In shallow water, proceed with caution and at very low speeds. Grounding or abrupt stops may result in injury and will incur damage to the jetboard, especially the fins.

Keep the paracord wrist strap and engine shut-off pin attached to the rider's wrist at all times and keep it free from snagging to help ensure the engine stops should the rider fall off or bail. If the paracord wrist strap and engine shut-off pin are not attached as recommended, the jetboard engine will not stop. After riding, remove the engine shut-off pin from the hand control to avoid accidental ignition or unauthorised use by children or others.

The performance of this jetboard may significantly exceed that of other watercraft you may have operated. Make sure you read and understand the "Riding Your Mako" section of this Operator's Guide to become completely familiar with the controls and operation of the jetboard before embarking on your first ride. If you have not had the opportunity to do so, practice basic manoeuvres in a suitable traffic free area to become accustomed to the feel and response of each control.

While your jetboard has the capacity of operating at high speeds, it is strongly recommended that high speed operation only be applied when ideal conditions exist and are permitted. Higher speed operation requires a higher degree of skill and increases the risk of severe injuries.

Always keep in mind that as the throttle trigger is returned to the idle position, less directional control is available. To turn the jetboard, both steering and throttle are necessary. Do not release throttle when trying to steer away from objects. You need throttle and jet-drive thrust to steer the jetboard effectively. If the engine is shut off, directional control is vastly limited.

CAUTION STOPPING DISTANCE WILL VARY DEPENDING ON INITIAL SPEED, WEIGHT OF RIDER, WIND AND WATER CONDITIONS. PRACTICE STOPPING MANOEUVRES IN A SAFE TRAFFIC-FREE AREA TO BECOME FAMILIAR WITH STOPPING DISTANCES UNDER VARIOUS OPERATING CONDITIONS.

WATER INGESTION

The Rotron XT100 2-stroke combustion engine needs air to operate; consequently the jetboard cannot be totally watertight. Any manoeuvres such as turning constantly in tight circles, plunging the nose through waves, or capsizing the jetboard, that cause the snorkel to be under water may cause severe engine problems due to water ingestion. Refer to the Maintenance section contained in this Operator's Guide.

JET-DRIVE

The Slingshot's jet-drive can cause injury. The jet-drive may pick up small stones or debris and throw it rearward causing a risk of injuring people, damaging the jet-drive unit, or other property and watercraft. Always stop the engine, remove the engine shut-off pin from the hand control, and where possible remove the battery pack before cleaning debris from the jet-drive inlet or nozzle.

BEFORE YOU RIDE

For safety reasons and proper care, always perform the pre-surf inspection as specified in this Operator's Guide before operating your Mako jetboard. Regularly inspect the jetboard, hull, engine, safety equipment, and all other gear and keep them in safe operating condition.

Keep an eye on the weather. Check local weather broadcasts before departure. Be alert to changing conditions. Before getting underway, check water conditions in the planned riding area.

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

NOTICE REMEMBER THAT LONG PERIODS OF EXPOSURE TO SUN, WIND, AND FATIGUE OR ILLNESS MAY IMPAIR YOUR JUDGEMENT AND REACTION TIME, INCREASING THE CHANCE OF AN ACCIDENT AND SERIOUS INJURY.

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

Always properly use the paracord wrist strap and engine shut-off pin when operating the jetboard and ensure that all riders are familiar with its use.

Ensure that any riders know how to swim and how to re-board the jetboard from the water. See best practice instructions in the "Riding your Mako" section of this Operator's Guide. Boarding in deep water can be strenuous. Practice in chest-deep water before operating or embarking on your jetboard in deep water. Ensure that all riders wear a PFD at all times and take extra precautions when riding.

Do not start the engine or operate the jetboard if anyone is close by, or in close proximity of the rear of the board. Keep away from the jet-drive inlet while the engine is running or the engine shut-off pin is engaged. Items such as long hair, loose clothing, or PFD straps can become entangled in moving parts.

SAFETY EXERCISES

It is always a good idea to practice and get familiar with all controls, functions and handling characteristics of your jetboard before venturing out into deeper waters.

IDEAL LOCATION

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

- No other water traffic
- Clear of people, objects and other watercraft.
- Be mindful of current, tides, rapids, wakes and waves that could affect safe operation. Avoid riding in rough waters or inclement weather.
- Ensure ample space to manoeuvre and that water depth is adequate.

PRACTICE EXERCISES

Practice alone the following exercises:

MOUNTING THE BOARD: Begin by mounting the jetboard in shallow water, no deeper than your thigh. Get familiar with starting the engine and operating the throttle. When comfortable with the exercise, increase the difficulty by moving into deeper water.

TURNING: Practice turning the jetboard in circles at slow speeds. Remember, to turn the jetboard, both steering and throttle are necessary. Start by performing a toe-side turn, then progress to a heel-side turn. When comfortable with the exercise, increase the difficulty by making some figure eights, transferring from toe-side to heel-side turns. When this is mastered, repeat the above exercises but at an increased speed.

STOPPING: When the throttle is released, the jetboard is slowed bywater drag against the hull. To come to a complete stop the engine must not be running. Practice stopping the board in a straight line, and at different speeds, to become familiar with stopping distances under various operating conditions. Stopping distance will vary depending on initial speed, weight of rider, wind and water conditions.

DISMOUNTING THE BOARD: Practice getting off the jetboard safely. Choose a spot that is free of swimmers, obstacles and other watercraft to avoid any collisions or accidents. Approach the shore or boat slowly and press the START/STOP button on the hand control. As the jetboard slows, loosen your feet from the foot straps. As the board comes to a stop, step off into the water with your knees flexed. Once in the water, reach for the grab handles to regain control of the board and to avoid the board drifting away from you.

OBSTACLE AVOIDANCE: Choose a virtual point in the water and practice obstacle avoidance by steering the jetboard and maintaining throttle. Repeat exercise, but this time release the throttle trigger while turning. With this exercise, you will become more confident and learn that you need to apply throttle to rapidly alter your direction and steer the jetboard to avoid a collision.

FACTORS NOT TO NEGLECT

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

- Weight of rider
- Currents, tides, wakes and waves
- Weather conditions, in particular wind speed and direction
- Water conditions

Make sure to be alert to these conditions, and adapt accordingly. If possible, practice the exercises further in these conditions. Always ride within your limits and skill level. For delicate or tricky manoeuvres, the best advice is always to try to reduce your speed to a minimum and then build up the speed until you are more confident and capable.

MAKO SLINGSHOT JETBOARD

OPERATOR'S GUIDE

Sales Policy & Warranty

MAKO WARRANTY

The Mako Boardsports limited warranty is valid for twelve consecutive months, effective from the original date of retail purchase or the date the jetboard was first put into service as a demonstrator or otherwise.

Our priority is to serve our riders with the most innovative jetboards and powered surfing equipment in the world, and to stand behind those products. For this reason, every Mako carries a simple promise: We'll take care of you and do what's right, so you can be assured that we've got you covered.

12-MONTH LIMITED WARRANTY

Under consumer laws in the UK, consumers are entitled to a free of charge repair or replacement, discount or refund by the seller, of defective goods or goods which do not conform with the contract of sale. For goods purchased in England or Wales, these rights expire six years from delivery of the goods and for goods purchased in Scotland, these rights expire five years from delivery of the goods.

When you purchase Mako hardware products, you as the original retail purchaser will also receive coverage from the Mako 12-Month Limited Warranty. This coverage operates alongside and in addition to your statutory rights under UK consumer law.

Should your product be defective or if it does not conform with the contract of sale, you can choose to make a claim under UK consumer law or the Mako 12-Month Limited Warranty (whichever is applicable).

The Mako 12-Month Limited Warranty covers Mako branded products only. Non–Mako branded products purchased from Mako Boardsports are also eligible for coverage under UK consumer law, but these are not covered by the Mako 12-Month Limited Warranty.

The Mako 12-Month Limited Warranty extends from the date of purchase, applies only to the original owner, and is not transferable. Any claim under this warranty must be made via email, or through an authorised dealer or distributor. Proof of purchase maybe required. A jetboard must be registered by the owner with Mako Boardsports before a warranty claim may be processed.

THE MAKO 12-MONTH LIMITED WARRANTY DOES NOT COVER THE FOLLOWING :

- Normal wear and tear to components of the jetboard. The threshold is to be decided solely by Mako Boardsports.
- The starter motor. Any starter issues will be considered on a case by case basis.
- Improper assembly or setup of the jetboard and its components.
- Failure to operate the jetboard in accordance with the recommended procedures and instruction.
- Improper or failure to properly maintain and service the jetboard in accordance with the recommended maintenance schedule and procedures.
- Installation of components, parts, or accessories not originally intended for or compatible with the jetboard as sold.
- Damage or failure due to water ingress, accident, misuse, abuse, or neglect.
- Labour charges for warranty parts replacement or changeover.
- Shipping charges and local import taxes for warranty parts replacement or changeover.
- Jetboards used for commercial activities, including those in rental, demo or training schools

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER LEGAL RIGHTS VARY BETWEEN STATES AND IN DIFFERENT GEO-POLITICAL REGIONS.

MAKO SALES POLICY

Mako Boardsports want to make sure you have a rewarding experience while you're exploring, evaluating and purchasing your products at makoboardsports.com or dealing with our local sales representatives.

These terms cover the way in which we supply our products to you. Please read these terms carefully.

These terms apply to any products purchased by you, the consumer, directly from Mako Boardsports. If you purchased our products through a dealer, training school or other third party distributor, their own terms of sale will apply. Please contact the relevant dealer, training school or other third party distributor for details.

All Products manufactured by Mako Boardsports are covered by a one year manufactures guarantee. If purchased through a Dealer support under this Warranty is provided through that Dealer. Owners are encouraged to register their purchase directly with Mako Boardsports to ensure fast and effective support is available. Registering your Mako jetboard for warranty is available via the Mako website.

INFORMATION ABOUT US

The Mako Online Store is operated by Mako Boardsports Ltd, incorporated in England with its registered office at 9 Chaldicott Barns, Tokes Lane, Semley Dorset SP7 9AW United Kingdom and with registered number 10390436 at the Registrar of Companies for England and Wales.

ELIGIBILITY TO PURCHASE

The purchase of merchandise through the Mako Online Store is strictly limited to parties who can lawfully enter into and form contracts on the website in accordance with English law.

In order to make purchases through the Mako Online Store, you will be requested to register and provide your personal details. In particular, customers must provide their real name, phone number, email address and other requested information as indicated. Furthermore, when ordering items, you will be required to provide payment details and you represent and warrant that the payment details you provide on ordering are both valid and correct and you confirm that you are the person referred to in the billing information provided.

We will only use any personal information you provide to us in accordance with our privacy policy.

CUSTOMER SERVICES

If you experience any problem with your order or want to check the status of your order, you may contact Mako Boardsports by phone on +44 (0)1747 448667 from Mon-Fri 08:30-17:00 GMT, or by email at info@makoboardsports.com

If we have to contact you we will do so by phone or email using the address you provide to us in your order.

ORDERS

All orders are subject to acceptance and availability. Once you have made your choice and your order has been placed, you will receive an email acknowledging the details of your order. This email is NOT an acceptance of your order. Unless you cancel your order, acceptance of your order and completion of the contract between you and Mako Boardsports will be perfected when we despatch the goods. The sale contract is therefore concluded in Dorset, England and the language of the contract is English.

We reserve the right not to accept your order in the event, for example, that we are unable to obtain authorisation for payment, that shipping restrictions apply to a particular item, that the item ordered is out of stock or does not satisfy our quality control standards and is withdrawn, or that you do not meet our eligibility criteria. If we are unable to accept your order for any reason, we will inform you of this and will not charge you for the product(s).

Furthermore, we may refuse to process a transaction for any reason or refuse service to anyone at any time at our sole discretion. We will not be liable to you or any third party by reason of our withdrawing any merchandise from the website whether or not that merchandise has been sold; removing, screening or editing any materials or content on the website; or refusing to process a transaction for any reason.

PRODUCTS

The images of our products on the Mako website are for illustrative purposes only. Although we have made every effort to display the colours accurately, we cannot guarantee that a device's display of the colours accurately reflects the colour of the products. Your product may vary slightly from those images. The packaging of the product may also vary from that shown in images on our website.

RIGHTS TO MAKE CHANGES

We may make minor changes to the product to reflect changes in relevant laws or regulatory requirements, or to implement minor technical adjustments, for example to address any safety issues. These changes will not affect your use of the product. If we need to make more substantial changes, we will notify you and you may contact us to end the contract before the changes take effect and receive a refund for any products paid for but not received.

PAYMENT

The price of the product (which includes VAT) will be indicated on the order pages when you placed your order. We take all reasonable care to ensure that the price of the product advised to you is correct. However, it is possible that despite our best efforts, some of our products may be incorrectly priced. We will usually check prices before accepting your order so that, where the product's correct price at your order date is less than our stated price at your order date, we will charge the lower amount. If the product's correct price at your order date is higher than the price stated to you, we will contact you for your instructions before we accept your order. If we accept and process your order where a pricing error is obvious and unmistakeable and could reasonably have been recognised by you as a mispricing, we may end the contract, refund you any sums you have paid and require the return of any goods provided to you.

Payment can be made by Visa, MasterCard , JCB, and Maestro debit cards. Payment will be debited and cleared from your account upon receipt of your order by Mako Boardsports. You confirm that the credit/debit card that is being used is yours. All credit/debit card holders are subject to validation checks and authorisation by the card issuer. If the issuer of your payment card refuses to authorise payment to Mako Boardsports, we will not be liable for any delay or non-delivery. We take all reasonable care to make our website as secure as we can make it. All credit card transactions on this site are processed using Stripe Merchant Services, a secure online payment gateway that encrypts your card details in a secure host environment.

To help ensure that your shopping experience is safe, simple and secure the Mako Store website uses Secure Socket Layer (SSL) technology.

Furthermore, we will take all reasonable care, in so far as it is in our power to do so, to keep the details of your order and payment secure, but in the absence of negligence on our part we cannot be held liable for any loss you may suffer if a third party procures unauthorised access to any data you provide when accessing or ordering from the website.

RETURNS & EXCHANGES

If you are unhappy for any reason after products have been dispatched to you or you have received them, you must return them to us.

Please return items to: Returns Department, Mako Boardsports Ltd, 14 Chaldicott Barns, Tokes Lane, Semley Dorset SP7 9AW United Kingdom

Should you wish to return anything bought from us, we will be happy to refund a product provided you have returned it to us within 14 days from the day you receive your order and provided it is unused and in a fully re-saleable condition.

We can only exchange items for the same product code . If you wish to exchange for a different item please send back original item for a refund and re-order via the Mako Online Store.

Before returning your item, please contact our Customer Service Team at info@makoboardsports.com for a Returns Authorisation Number. Please include this number with your return. This will help us to track your return and ensure you receive your exchange or refund promptly.

All items should be returned in original, undamaged packaging. If the product returned is not in a fully resaleable condition or the packaging is damaged, we do reserve the right to refuse a refund on the item, or deduct up to 25% of the original selling price from the refund amount. All refunds will be credited back onto the card that you made payment with.

Refunds will be made within 14 days from the day on which we receive the product back from you or, if earlier, from the day on which you provide us with evidence that you have sent the product back to us. Refunds can take up to 21 days to show back in your account from the date of processing the return.

Returning an item is your responsibility until it reaches us. We recommend that you send items back on a signed-for service making sure that you are insured for the value of the items.

DELIVERY

The costs of delivery will be as displayed to you on our website. During the order process we will let you know an estimated delivery date. We will then contact you closer to the estimated delivery date to agree a delivery date. If our supply of the products is delayed by an event outside our control then we will contact you as soon as possible to let you know and we will take steps to minimise the effect of the delay. Provided we do this we will not be liable for delays caused by the event.

If no one is available at your address to take delivery, we will leave you a note informing you of how to rearrange delivery. If you do not re-arrange delivery we will contact you for further instructions and may charge you for storage costs and any further delivery costs. If, despite our reasonable efforts, we are unable to contact you or re-arrange delivery or collection we may end the contract. We will refund any money you have paid in advance for products we have not provided but we may deduct or charge you reasonable compensation for the net costs we will incur as a result of your failure to take delivery.

We will refund the purchaser any delivery charge paid when a product is faulty or damaged. If you are returning something for any other reason, including where you are exercising your right to change your mind, you'll need to pay the carriage costs or alternatively we reserve the right to deduct carriage costs from your refund.

FAULTY ITEMS

All Products manufactured by Mako Boardsports are covered by a 12 month limited manufacturer's warranty.

Owners are encouraged register their purchase directly with Mako Boardsports to ensure fast and effective support is available.

If you receive a faulty or damaged item or find that the item becomes faulty within 3 months of purchase it will need to be sent back to us for inspection. Items will need to be returned with proof of purchase and your full contact details. Items that are sent back because of a fault will be exchanged where possible or refunded for the price paid. If proof of purchase cannot be provided, credit note and exchange values will be processed at the current selling price of the product returned. If you receive a faulty or damaged item or a fault subsequently develops, please report this to us through the warranty page on our website . This allows you to report the issue and include photos so that we can best solve the issue. Your legal rights in relation to repairs, replacements and refunds are set out in the box below.

Items that are sent back because of a fault will be repaired or replaced where possible, or refunded for the price paid. In the event that the items need to be

returned to us, these will need to be accompanied by proof of purchase and your full contact details.

If you have any questions or complaints about the product, please contact us using the details above. We are under a legal duty to supply products that are in conformity with this contract. See below for a summary of your key legal rights in relation to the product.

YOUR KEY LEGAL RIGHTS

This is a summary of your key legal rights. These are subject to certain exceptions. For detailed information please visit the Citizens Advice website https://www.citizensadvice.org.uk/.

The Consumer Rights Act 2015 says goods must be as described, fit for purpose and of satisfactory quality. During the expected lifespan of your product your legal rights entitle you to the following:

a. Up to 30 days: if your goods are faulty, then you can get an immediate refund.

b. Up to six months: if your goods can't be repaired or replaced, then you're entitled to a full refund, in most cases.

c. Up to six years or more: if your goods do not last a reasonable length of time you may be entitled to some money back.if a fault develops after the first six months, you may have the right to make a claim but the burden is on you to prove that the product was faulty at the time you took ownership of it. This right expires after 6 years.

CANCELATIONS

TheYou can always end your contract with us, although your rights when you end the contract will depend on the reasons for cancellation.

If the products are faulty or misdescribed, you may have a legal right to end the contract (or to get the product repaired or replaced). Please see section: "Faulty items".

If you are ending a contract for a reason set out at (a) to (e) below the contract will end immediately and we will refund you in full for any products which have not been provided and you may also be entitled to compensation:

a. we have told you about an upcoming change to the product or these terms which you do not agree to (see section: "Our rights to make changes");

b. we have told you about an error in the price or description of the product you have ordered and you do not wish to proceed;

c. there is a risk that supply of the products may be significantly delayed because of events outside our control;

d. we have suspended supply of the products for technical reasons, or notify you we are going to suspend them for technical reasons, in each case for a period of more than 30 days; or

e. you have a legal right to end the contract because of something we have done wrong.

Even if we are not at fault and you do not have a right to change your mind (see above) you can still end the contract before it is completed, but you may have to pay us compensation. If you want to do so, please contact us using the details set out above. The contract will end immediately and we will refund any sums paid by you for products not provided but we may deduct from that refund (or, if you have not made an advance payment, charge you) reasonable compensation for the net costs we will incur as a result of your ending the contract.

If you'd like to cancel or change your order, please call us as soon as possible on +44 1747 448667. We'll do everything we can to accommodate your request. But please bear in mind that our order-fulfilment and shipping systems are designed to get orders on their way quickly and efficiently, and we cannot change or cancel an order once it has entered the shipping process. You can return products after receipt in accordance with our Returns Policy or your right to cancel.

You have the right to cancel your order within 14 days from the day on which you acquire, or a third party other than the carrier acquires, physical possession of the goods without giving any reason.

You shall send back the goods to us, without undue delay and in any event not later than 14 days from the day on which you communicate your withdrawal from this contract to us. The deadline is met if you send back the goods before the period of 14 days has expired. You will have to bear the direct cost of returning the goods.

Should you wish to cancel your made-to-order or made-to-measure product for any reason and it's unlikely that we could sell it to another customer at full selling price. We'll charge a cancellation fee of 25% of the full selling price. In respect of these products our usual refund policy does not apply, and products cannot be returned or exchanged unless faulty.

OUR RIGHTS TO END THE CONTRACT

We may end the contract for a product at any time by writing to you if:

a. you do not make any payment to us when it is due and you still do not make payment within 7 days of us reminding you that payment is due;

b. you do not, within a reasonable time of us asking for it, provide us with information that is necessary for us to provide the products, e.g. delivery details; or

c. you do not, within a reasonable time, allow us to deliver the products to you or collect them from us; or

d. you do or do not do anything else that constitutes a breach of these terms.

If we end the contract in the situations set out above we will refund any money you have paid in advance for products we have not provided but we may deduct or charge you reasonable compensation for the net costs we will incur as a result of your breaking the contract.

OUR RESPONSIBILITY FOR LOSS OR DAMAGE SUFFERED BY YOU

If we fail to comply with these terms, we are responsible for loss or damage you suffer that is a foreseeable result of our breaking this contract or our failing to use reasonable care and skill, but we are not responsible for any loss or damage that is not foreseeable. Loss or damage is foreseeable if either it is obvious that it will happen or if, at the time the contract was made, both we and you knew it might happen, for example, if you discussed it with us during the sales process.

We do not exclude or limit in any way our liability to you where it would be unlawful to do so. This includes liability for death or personal injury caused by our negligence or the negligence of our employees, agents or subcontractors; for fraud or fraudulent misrepresentation; for breach of your legal rights in relation to the products (including the right to receive products which are a) as described and which match information we provided to you and any sample or model seen or examined by you; b) of satisfactory quality; c) fit for any particular purpose made known to us; and d) supplied with reasonable skill and care); and for defective products under the Consumer Protection Act 1987.

We only supply the products for domestic and private use. If you use the products for any commercial, business or re-sale purpose we will have no liability to you for any loss of profit, loss of business, business interruption, or loss of business opportunity.

STATUTORY RIGHTS

None of the above affect your statutory rights when goods are faulty, or not as described.

OTHER IMPORTANT TERMS

We may transfer our rights and obligations under these terms to another organisation. You may only transfer your rights or your obligations under these terms to another person if we agree to this in writing.

This contract is between you and us. No other person shall have any rights to enforce any of its terms.

Each of the paragraphs of these terms operates separately. If any court or relevant authority decides that any of them are unlawful, the remaining paragraphs will remain in full force and effect.

If we do not insist immediately that you do anything you are required to do under these terms, or if we delay in taking steps against you in respect of your breaking this contract, that will not mean that you do not have to do those things and it will not prevent us taking steps against you at a later date.

These terms are governed by English law and you can bring legal proceedings in respect of the products in the English courts.

DIRECT CONTACT INFORMATION

MAKO BOARDSPORTS LTD.
14 CHALDICOTT BARNS
TOKES LANE
SEMLEY
DORSET SP7 9AW
UNITED KINGDOM

Tel: +44 (0)1747 448 667
Email: info@makoboardsports.com
Web: www.makoboardsports.com

MAKO SLINGSHOT JETBOARD

DECLARATION OF CONFORMITY

(ONLY FOR THE EUROPEAN UNION)

DECLARATION OF CONFORMITY OF RECREATIONAL CRAFT WITH THE DESIGN, CONSTRUCTION AND NOISE EMISSION REQUIREMENTS OF DIRECTIVE 2013/53/EU

MANUFACTURER

Mako Boardsports Ltd.
14 Chaldicott Barns, Tokes Lane, Semley,
Dorset, SP7 9AW, United Kingdom

Tel. +44 (0)1747 448 667
Email. info@makoboardsports.com

AUTHORISED REPRESENTATIVE (IF APPLICABLE)

Name: .....

Address: .....

.....

Tel: .....

BODY FOR NOISE EMISSION ASSESSMENT

HPi Verification Services Ltd.
Manor House, Howbery Park, Wallingford OX10 8BA
United Kingdom **Tel.** +44 (0)1491 822 818

BODY FOR NOISE EMISSION

HPi Verification Services Ltd.
Manor House, Howbery Park, Wallingford OX10 8BA
United Kingdom **Tel.** +44 (0)1491 822 818

DESCRIPTION OF WATERCRAFT

Jetboard Identification No: .....

Rotron Serial No: .....

Construction Module:	A1	**Propulsion Type:**	2-Stroke Petrol Engine / Inboard
Brand Name:	Mako Boardsports	**Displacement:**	90cc
Watercraft Model:	Slingshot	**Engine Power:**	9.4HP @ 7500RPM
Type of Watercraft:	Motorised Surfboard	**Engine Name:**	Rotron XT100
Max. Design Category:	Category D		
Type of Hull:	Monohull		
Construction Material:	Carbon Fiber		
Hull Dimensions:	1880mm x 596mm x 447mm		

ESSENTIAL REQUIREMENTS

Exhaust Emissions: Directive 2013/53/EU Emission (CO) – 282,06 g/kWh; Emission (NOx); 13,56 g/kWh; Emission (HC) – 13,56 g/kWh

Noise Emissions:
Directive 2013/53/EU
Noise emission levels: < 67 dB

This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the craft manufacturer that the craft mentioned above complies with all applicable essential requirements in the way specified and is in conformity with the type for which above mentioned EC certificate has been issued.

Name and Function: GUY MARSON, MANAGING DIRECTOR, MAKO BOARDSPORTS LTD.
Year of Issue: 2021 **Place of Issue:** DORSET, UNITED KINGDOM

Signature: .....

MAKO BOARDSPORTS

14 CHALDICOTT BARNS, TOKES LANE, SEMLEY, DORSET SP7 9AW UK
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MADE IN THE UK

MK-M1400-DWV5.0-MAR2021