

## 21.1 GLOSSARY OF TERMS

<b>Aftermarket Part</b>	A part replacing or used in addition to the original equipment part. Aftermarket parts are not limited to providing the same function as their original equipment counterparts.
<b>Ambulance</b>	A properly licensed and equipped emergency vehicle normally noted as a rescue vehicle, or ambulance. Said vehicle will be fully equipped to include basic life support equipment and personnel trained in the use of said equipment.
<b>Bond Flange</b>	The bond flange is the overlapping/mating section where the deck (upper) and the hull (lower) portions are joined.
<b>Buoy</b>	A floating object anchored in the water to mark the course.
<b>Competitor</b>	An IJSBA member who has fulfilled all necessary requirements to participate in an event and who is present at the event for the purpose of participating (also <b>Entrant, Participant, Racer, Rider</b> ).
<b>Course Marshal</b>	Helps the Race Director control the race and assists stopped riders on the course. Most often is positioned on the course perimeter riding a watercraft.
<b>Deck</b>	The upper structural body of the watercraft located above (and including) the upper bond flange.
<b>DNR</b>	Did Not Race. Official classification of an entered rider who does not start an event or, in closed course competition, does not complete one lap.
<b>Entrant</b>	See <b>Competitor</b> .
<b>Fuel Injection</b>	Any system that does not depend solely on the engine's vacuum to induct fuel into the engine will be considered a fuel-injection system.
<b>Homologation</b>	The process of officially approving or allowing a component or watercraft to compete in IJSBA events.
<b>HIN</b>	Hull Identification Number. A unique serial number generated by the manufacturer and affixed to each watercraft.
<b>Hull</b>	The lower structural body of the watercraft located below (and including) the lower bond flange.
<b>LCQ</b>	Last Chance Qualifier. A closed course event that generally follows a heat race and is used to complete the starting field for a final or semi-final.
<b>Member</b>	A person belonging to the IJSBA holding a valid and proper member card.
<b>Moto Scoring</b>	One of two races where the finishing positions are used to award championship or series points under the Moto Scoring system (see sections 17.8, pg. 68).
<b>Official</b>	A person who supervises a race.
<b>Original Equipment</b>	Parts that were installed on each model of watercraft at the time of manufacture (a.k.a. <b>OE</b> or <b>OEM</b> ).
<b>Owner</b>	The person named on the title of the watercraft.
<b>Participant</b>	See <b>Competitor</b> .
<b>Participate</b>	To willfully take part in a race (also <b>Compete</b> ).
<b>PFD</b>	Personal Flotation Device. A device used to keep riders afloat, required in all forms of IJSBA activity.
<b>Pit Area</b>	Area used by riders and mechanics to make machine repairs, refuel and make rider changes.
<b>Pit Crew</b>	A rider support person or group that prepares and maintains the watercraft.
<b>Promoter</b>	A person or body controlling a facility where events are organized, promoted and staged.
<b>PWC</b>	Personal Watercraft: A vessel which uses an inboard motor powering a water jet pump as its primary source of motive power. Designed to be operated by a person sitting, standing or kneeling on the vessel rather than inside it.
<b>Race</b>	A contest of skill for watercraft and riders.
<b>Race Director</b>	The person responsible for the conduct of the race.
<b>Racer</b>	See <b>Competitor</b> .
<b>Replacement Part</b>	A non-original equipment part used to replace an original equipment part. Replacement parts are limited to providing only the dimensions, performance and function that their OEM counterparts provide.
<b>Replica</b>	A copy or duplicate.
<b>Rider</b>	See <b>Competitor</b> .
<b>Riding Platform</b>	The part of the watercraft where the rider stands or sits.
<b>Sanction</b>	An agreement between the IJSBA or IJSBA affiliate and a promoter that stipulates specific criteria to be met by the promoter in exchange for IJSBA support.
<b>Sponson</b>	A special surface which may be attached to the hull sides or transom for stability.

***Ski Division Only:*** Sponsons may be attached to the hull sides, transom or inside the bond flange portion of the hull.

<b><i>Sponsor</i></b>	A person or group that provides support to a rider, promoter or association usually in exchange for promotion.
<b><i>Staging Area</i></b>	The place near the starting line where watercraft and riders wait for their scheduled race.
<b><i>Starter</i></b>	The person who officially gives the signal to begin the race.
<b><i>Starting Line</i></b>	A straight boundary, either real or imaginary, that denotes the beginning point of the race.
<b><i>Strake</i></b>	A well-defined angle (longitudinal step) usually added to deep-V hulls for a softer ride at high speeds.
<b><i>Technical Director</i></b>	The person who checks all competing watercraft for rules compliance and eligibility.
<b><i>Trim Tab</i></b>	An extension of the hull's planing surface. Trim tabs are attached to the transom of the hull and may be angled up or down to alter the running angle of the craft.

## IJSBA Weighing Procedure

Weight control is an integral focus of IJSBA's competition program. There are two times weight is calculated: 1) minimum weights for homologation 2) legal weights for competition.

When a PWC is homologated, the OEM published weight is the official weight of a particular unit unless IJSBA issues an alternative official weight. Where an official weight is posted on the website, this shall supersede any posted weight for a unit irrespective of the source.

In Stock Classes, runabout PWC, powered by four stroke engines, may have weight reduced by a maximum amount of 35lbs (15.88kg) Stock Class PWC that are reduced in weight by more than 35lbs will be disqualified irrespective as to whether all of the modifications applied to the weight reduction were permitted within the Stock Class rules. All other PWC may reduce weight by the amount achieved by any and all legal modifications to the unit. When there is doubt whether a PWC is within the legal limit, the PWC must be drained of fuel and compared against the dry weights to determine compliance.

In Limited Class, all PWC may reduce weight by the amount achieved by any and all legal modifications to the unit except for four stroke powered engines which are subject to minimum weights of 550lbs (250kg) or 600lb (272kg) as outlined in section 5.5.4.

In Open Classes, runabout PWC, powered by four stroke engines, must weigh a minimum of 750lbs (340.2kg). All other PWC must weigh no less than 10% of the weight as determined by IJSBA. The weight of an Open Class PWC is determined by 8.1.5 as a comprehensive section. Any Open Class Runabout PWC, powered by a four stroke engine, that weighs less than 750lbs shall be disqualified irrespective as to whether all of the modifications applied to the weight reduction were permitted within the Open Class rules

The proper procedure for weighing an Open Class PWC is to begin by draining the unit of any residual water. Reasonable amounts of water that rest in the areas of compartments (i.e. trace water that tends to accumulate in areas such as hull corners, between seams, behind mirrors, etc.) do not have to be removed before weighing. Any ballast weight may be added prior to competition only. In addition to ballast, all fuel and oil tanks/reservoirs may be completely filled with respective fluids accordingly (only the functioning tanks that were used during competition may be filled, fluid may not be used as ballast other than in functioning fuel and oil tanks/reservoirs or where some water is allowed to exist in the hull and waterbox). Waterboxes do not need to be emptied of water unless the waterbox is modified or aftermarket and allows for a disproportionate amount of water to be stored or remain in the waterbox. The battery used during competition shall be included in the determined weight of the PWC; batteries damaged during competition may be replaced only with the exact make and model of the damaged battery.

IJSBA Rule 8.1.5 requires that the weight of the determined dry weight, minus 10%, is required to be maintained at all times while the weight of 750lb is not specifically mentioned to be maintained at all times. IJSBA further notes that Rule 8.1.5 allows the weight of watercraft in Open Class to include fuel and oil when being compared against the dry weight (as opposed to Stock Class where minimum competition weight is compared to the published weight). 8.1.5 is silent in whether the allowance for fuel and oil includes the fuel and oil that exists when the PWC is being weighed or whether it includes the fuel and oil that would be in the PWC if the PWC were filled to capacity with both fuel and oil. The ruling for weight in these cases is the following:

1. The 750lb minimum weight for four stroke runabout is a substitute for the criteria of OEM dry weight, minus 10%, that exists for all other PWC as the weight which must be maintained at all times.
2. The provision for fuel and oil includes only the fuel and oil that remain in the respective tanks/reservoirs at the time the watercraft is being weighed.\*
3. The provision for adding ballast prior to competition refers to the first time that PWC competes at an event.

Therefore, Rule 8.1.5 shall mean that if a four stroke powered PWC, competing in the Open Class, ever weighs less than 750lbs then that PWC shall be disqualified from all prior Open Class competition at that event and shall be ineligible for any further Open Class competition at that event. Fuel Tanks may not be filled after competition to make minimum weight. Only ballast that is added prior to the first heat or moto will be counted for the minimum weight. A PWC disqualified for being less than the minimum weight cannot be corrected in subsequent heats or motos of the same event. A PWC disqualified for failing to meet the minimum weight is disqualified from all portions of that event, including those portions that have already occurred. However, in a case where a PWC is competing in several classes (ie GP and Open) at the same event, and ballast is used to make minimum weight in the Open Class, that ballast does not have to be used in other classes where the minimum weight may be less than 750lbs.

## 6.1 RUNABOUT STOCK CLASS COMPETITION

Intended to promote interest in stock personal watercraft competition and to enable individuals to become active competitors with relatively modest investment and maintenance costs. The goal of Stock Class racing is to have a very close nexus to the watercraft that come off of the showroom floor. Watercraft competing in these classes must conform to the specifications which follow. Note: classes may be offered that have greater restrictions than these Stock Class Provisions. Such class offerings must be named to differentiate the applicable rules (ie Novice Ski Showroom Stock, etc.)

**WEIGHT ADDENDUM: Four Stroke Runabouts, competing in Stock Classes, must weigh within a difference of no more than 35 lbs (15.88 kg) lighter than the OEM weight as determined by IJSBA. Four Stroke Runabouts, competing in Rec Lites Classes, must weigh within a difference of no more than 10 lbs (4.54 kg) lighter than the OEM weight as determined by IJSBA.**

**REC LITES ADDENDUM: Runabout Rec Lites is a Stock Class designed for runabouts that are intended for the entry level recreation market. To be eligible for the Rec Lites division, the qualifying runabout must be powered by a normally aspirated four stroke engine and have a base Manufacturers Suggested Retail Price, in the United States, of less than \$8,500 USD. In addition, the qualifying runabout must adhere to all Runabout Stock Class Rules and conform to the following: A maximum of 950cc for a unit weighing up to 750 LBS (335.66 kg) and a maximum of 1100cc for a unit weighing 750 LBS (335.66 kg) or more. At the discretion of the organizer, two stroke units may compete with a maximum displacement of 735cc.**

- 6.1.1 **All watercraft must remain strictly stock, except where rules allow or require substitutions or modifications. Changes or modifications not listed here are not permitted. The IJSBA may allow additional modifications to Stock Classified PWC which provide for replacement/reinforcements to parts and components (i.e. intercooler end caps, brackets, fittings, etc.) that have known failure risks in race conditions. Such changes will only be allowed if the replacements/modifications result in no volume or performance gains. Such allowances are only legal if published by the IJSBA.** Some original equipment components may not comply with IJSBA rules. Hull Identification Numbers must be displayed as furnished by the manufacturer.

**NOTE: When rules permit or require equipment to be installed, replaced, altered or fabricated, it is the sole responsibility of the rider to select components, materials and/or fabricate the same so that the watercraft operates safely in competition.**

- 6.1.2 Original equipment parts may be updated to newer original equipment parts of the same model. The part must be a bolt-on requiring no modifications to that part or any other parts except where rules allow substitutions or modifications. Unless reoffered to as the same identical part in the OEM parts/repair manual, parts may not be backdated. (Refer to Model Homologation listing on page 10-11.)
- 6.1.3 Sound level shall not exceed 86 dB(a) at 22.86m (75 ft.). See Section 19.5 (pg. 78).
- 6.1.4 Engine fuel must consist of gasoline meeting the criteria defined in Section 19.4.3 (pg. 78).

## 6.2 HULL

- 6.2.1 All watercraft must have a flexible tow loop attached to the bow. The tow loop should be made of a flexible material (e.g., nylon strap, rope, etc.) so as not to create a hazard. Tow hooks which protrude beyond the plane of the hull must be removed.
- 6.2.2 Hull and deck repairs may be made. However, these repairs must not alter the original configuration by more than 2.00mm (0.08 in.). Drop-in type storage buckets may be modified, aftermarket or removed provided a hazard is not created.
- 6.2.3 All watercraft may be equipped with a maximum of two sponsons. Original equipment sponsons may be modified, aftermarket, repositioned or removed. Overall length of each sponson shall not exceed 91.45cm (36.00 in.). Sponsons shall not protrude from the side of the hull by more than 100.00mm (3.94 in.) when measured in a level horizontal plane. The vertical channel created by the underside of the sponson shall not exceed 63.5mm (2.50in). No part of the sponson shall extend downward below the point at which the side of the hull intersects the bottom surface of the hull by more than 38.00mm (1.50 in.). Aftermarket or modified sponsons must exceed 6mm (0.24 in.) in thickness. All leading edges must be radiused so as not to create a hazard. Sponsons may not be attached to the planing surfaces of the hull. Fins, rudders, skegs and other appendages that may create a hazard will not be allowed. (See diagrams in Appendix.)
- The decision of the Technical Director and/or Race Director regarding modifications will be final. Any question regarding the legality of modifications should be directed to the IJSBA or IJSBA affiliate prior to use in competition.
- 6.2.4 Intake grate may be modified or aftermarket. Intake grate is required and must be the full-length type with at least one bar running parallel to the drive shaft. Grates may not extend more than 12.00mm (0.47 in.) below the flat plane of the pump intake area. All leading edges must be radiused so as not to create a hazard.
- 6.2.5 Pump cover plate may be modified or aftermarket. An extension may be added to the rear of the pump cover plate but shall not exceed the width of the original equipment plate. Modified and aftermarket plates must not extend more than 100.00mm (3.94 in.) beyond the end of the original equipment plate for **Ski** and **Sport Division** or 177.80mm (7.00 in.) for **Runabout Divisions**. The sides of the extension must be connected to the radiused portion of the pump plate so as not to create a hazard. Fins, rudders, skegs and other appendages that may create a hazard will not be allowed. (See diagram in Appendix.)

- 6.2.6 Replacement trim plates may be used. Only replica parts that offer handling characteristics the same as stock are allowed. Material shall not be restricted to original equipment provided a hazard is not created (i.e., aluminum in place of plastic). See Glossary of Terms for definition of Replacement and Replica.
- 6.2.7 Replacement bumpers may be used provided a hazard is not created.
- 6.2.8 A soft, flexible water-spray deflector may be attached to the hull sides or to the bond flange provided a hazard is not created. No part of the deflector may extend beyond the perimeter of the original equipment bumper or side moldings as measured by a plumb line.
- 6.2.9 Handlebar, throttle, throttle cable, and grips may be modified or aftermarket. Handlebar cover may be modified or removed. Aftermarket switches and switch housings may be used. Steering shaft, steering shaft holder and handlebar holder may be aftermarket. The handlebar must be padded at the mounting bracket or, if it has a crossbar, the crossbar must be padded. Quick-turn steering modifications to alter steering ratio are allowed. Aftermarket steering cables will be allowed.
- 6.2.10 Original equipment seat base must be used. Seat cover may be changed. The OEM seat height cannot be changed by more than +/- 12.7mm (0.5 in). **Seat must remain OEM, seat cover can add no more than .5 inch in thickness in any direction.**
- 6.2.11 Padding and/or mat kits may be added and custom painting is allowed. The surface finish of any metal component outside the hull area above the bond flange may be polished, shot peened or painted.
- 6.2.12 Original bilge pump may be modified or disconnected. Aftermarket bilge draining systems that do not create a hazard are allowed.
- 6.2.13 Engine compartment ventilation tubes must remain as originally equipped.
- 6.2.14 Original equipment braking devices may be disabled for safety purposes. Reverse buckets may be removed or disabled (modified to disable reverse function is acceptable so long as a hazard is not created) but reverse control cables, motors, and mechanisms must remain in place.
- 6.3 ENGINE — TWO-STROKE
- 6.3.1 Engines may be bored. Replacement piston assemblies may be used provided the original port timing, compression ratio, dome profile, skirt length and shape and type of material are not changed. Non-conforming pistons (ie skirt shape that is not an exact replica of the OEM piston) may be approved by the IJSBA but such approval must be obtained in writing. Replacement piston assemblies must weigh within  $\pm 25.00\%$  of original equipment. Engine displacement must not exceed class designation (e.g., 550cc in 550 Stock, 850cc in 850 Stock, etc.) unless otherwise noted. Chamfering of cylinder ports must not exceed 1.00mm (0.04 in.) at a 30 degree maximum angle. (See diagram in Appendix.).
- 6.3.2 Crankshaft may be rebuilt using replacement counterweights, crank pins, bearings and connecting rods. Counterweights, crank pins and connecting rods made of non-ferrous metals are not allowed. Stroke and rod length may not be changed. Counterweights on non-rebuildable style crankshafts may be machined to accept a press-through crank pin. Replacement bearings must maintain their original type and dimensions. Replacement counterweights must resemble the original part (i.e., holes and/or pockets not existing on the original part may not be on the replacement part). Total weight of the crankshaft assembly must be within  $\pm 5.00\%$  of original equipment. Crankpins may be welded and/or keyed to the counterweights.
- 6.3.3 Repairs to cracked or punctured crankcases may be made provided only one damaged area affecting one cylinder bank has been repaired. No other modifications or repairs are allowed.
- 6.3.4 External modifications to the engine finish (e.g., plating, polishing and/or painting) are allowed for cosmetic purposes only.
- 6.3.5 No internal modifications of any kind, including grinding, surfacing, polishing, machining, shot peening, etc., will be allowed on any engine components.
- 6.3.6 Exhaust system must remain stock as supplied by the manufacturer. An insert may be added to reduce the inside diameter of the stinger portion of the exhaust system.
- 6.3.7 Engine, Intercooler, and Oil Cooler water cooling systems may be modified or aftermarket. Additional water cooling lines and aftermarket water bypass fittings may be added. OEM water bypass fittings may be modified or relocated. All bypass fittings must be directed downward and/or rearward so as not to create a hazard for other riders. Additional cooling supply lines and fittings may be added to the pump. Pump water inlet covers and water strainers (filters) may be modified or aftermarket. Intercooler assembly/housing must remain OEM in stock class, additional cooling supply lines and bypass fittings may be added to the OEM Intercooler Housing. Additional cooling supply lines may be added to water inlet covers that are removable from the engine block. Existing fittings may be aftermarket or modified so long as the OEM thread diameter is maintained. Fittings may not be added to the cylinder head, cylinder, or crankcase. Intercooler pressure relief valves (mechanical) are allowed for the purposes of regulating water pressure. Any valves used within the entire cooling system must be of the fixed type or automatic (e.g., thermostats, pressure regulators, etc.). Electronically controlled valves or water injections systems are not allowed unless originally equipped. Manually controlled devices (by any means of actuation) that alter the flow of cooling water during operation are not allowed. Cooling system flush kits are allowed."
- 6.3.8 Replacement starter motor and bendix may be used.
- 6.3.9 Replacement engine mounts may be used.
- 6.3.10 Oil-injection system may be disconnected or removed.
- 6.3.11 Replacement of general maintenance parts (e.g., gaskets, seals, spark plugs, spark plug wires, spark plug caps, wiring, water hoses, fuel lines, clamps and fasteners) shall not be restricted to original equipment providing the following:
- 1) Replacement gaskets may be used but must be of the same type (e.g., sheet, o-ring, etc.) as their OEM counterparts. With the exception of head gaskets and base gaskets, all replacement gaskets must maintain a thickness of plus or minus 20% of the OEM gasket thickness as furnished by the manufacturer. Base gasket cannot be thicker than 0.8mm (0.032in). Head gaskets must be no thinner than .005mm (0.002in) than the OEM thickness as supplied by the

manufacturer. Head gaskets must be no thicker than 1.55mm (0.06in) than the OEM thickness as supplied by the manufacturer.

#### 6.4 ENGINE — FOUR-STROKE

6.4.1 Engines may be bored. Replacement piston assemblies may be used provided the original port timing, compression ratio, dome profile, skirt length and shape and type of material are not changed. Chamfering of cylinder ports must not exceed 1.00mm (0.04 in.) at a 30 degree maximum angle. (See diagram in Appendix.).

Cylinder head combustion chambers may be cleaned by bead blasting with valves seated in place. Intake and exhaust ports may not be bead blasted or cleaned with abrasive material such as steel wool or Scotch-Brite®. Repairs to the cylinder head affecting one cylinder bank are allowed.

6.4.2 Crankshaft must remain stock. Replacement bearings or bearing shells are allowed, providing they mai in their original type and dimensions.

6.4.3 Camshaft(s) must remain stock. Replacement bearings or bearing shells are allowed, providing they maintain their original type and dimensions. Camshaft timing may be changed.

6.4.4 Engine, Intercooler, and Oil Cooler water cooling systems must remain as OEM. Water strainers (filters) may be modified or aftermarket. Intercooler assembly/housing must remain OEM. Existing fittings may be aftermarket or modified so long as the OEM thread diameter is maintained. Fittings may not be added to the cylinder head, cylinder, or crankcase. Electronically controlled valves or water injections systems are not allowed unless originally equipped. Manually controlled devices (by any means of actuation) that alter the flow of cooling water during operation are not allowed. Cooling system flush kits are allowed. .

6.4.5 Replacement of general maintenance parts (e.g., gaskets, seals, spark plugs, spark plug wires, spark plug caps, wiring, water hoses, fuel lines, clamps and fasteners) shall not be restricted to original equipment providing the following:

- 1) Replacement gaskets may be used but must be of the same type (e.g., sheet, o-ring, etc.) as their OEM counterparts. With the exception of head gaskets and base gaskets, all replacement gaskets must maintain a thickness of plus or minus 20% of the OEM gasket thickness as furnished by the manufacturer. Base gasket cannot be thicker than 0.8mm (0.032in). Head gaskets must be no thinner than .005mm (0.002in) than the OEM thickness as supplied by the manufacturer. Head gaskets must be no thicker than 1.55mm (0.06in) than the OEM thickness as supplied by the manufacturer.
- 2) Stripped threads must be repaired to the original size.
- 3) Fasteners (e.g., bolts, nuts and washers) may not be substituted with titanium pieces unless originally equipped. Fasteners may integrate locking mechanisms.
- 4) Replacement hoses and fuel lines may not provide any other function than original equipment hoses. Changes in temperature tolerances are allowed.

6.4.6 Exhaust manifolds that have previously been drilled or tapped may be used so long as the holes are filled or capped.

#### 6.5 AIR/FUEL DELIVERY — TWO-STROKE

6.5.1 Aftermarket flame arresters that meet USCG, UL-1111 or SAE J-1928 Marine standards may be used. Carburetor jets (replaceable type), needle valves and needle valve springs may be changed. Choke may be removed provided additional air intake for the engine is not created. Aftermarket primer system may be installed. No other carburetor modifications will be allowed.

6.5.2 The entire fuel system is a closed system. The watercraft must not vent or spill fuel at any attitude with or without the engine running. Original equipment fuel tank, fuel pickup, fuel filler, fuel filter, fuel tap assembly and relief valve must be used and cannot be modified. Fuel petcock may be bypassed. Additional fuel filters may be used. Fuel tank filler cap may be modified or aftermarket provided a hazard is not created.

#### 6.6 AIR/FUEL DELIVERY — FOUR-STROKE

6.6.1 Electronic fuel-injection systems: Flame arresters that meet USCG, UL-1111 or SAE J-1928 Marine backfire flame arrester test standards must be installed. If not equipped with an airflow sensor, the ducting between the flame arrester and throttle body may be modified or aftermarket. If originally equipped with an airflow sensor, the ducting may be modified or aftermarket between the flame arrester and airflow sensor. Modifications to the airflow downstream of the airflow sensor are not allowed. No modifications to the turbocharger and supercharger system, if applicable, are allowed. All portions of the intake manifold, including screens or other filtering or spark suppressing devices, must remain as originally equipped.

6.6.2 Carbureted induction systems: Flame arrestors that meet USCG, UL-1111 or SAE J-1928 Marine backfire flame arrester test standards must be installed. Carburetor jets (replaceable type), needle valves and needle valve springs may be changed. Choke may be removed provided additional air intake for the engine is not created. Aftermarket primer system may be installed. No other carburetor modifications will be allowed.

6.6.3 Fuel injectors and fuel pump must remain stock as furnished by the manufacturer.

#### 6.7 IGNITION AND ELECTRONICS — TWO-STROKE

6.7.1 Replacement batteries are allowed but must fit into the original equipment battery box and be securely fastened.

- 6.7.2 The original electronic control unit may be modified or aftermarket so long as it does not offer any additional inputs or outputs than the original unit, and it must connect with the original connections. No additional sensors may be added (e.g., exhaust gas temperature, detonation sensors, etc.). Engine temperature sensors may be disabled.
- 6.7.3 Ignition timing may be altered by slotting ignition trigger mounting plate. An adapter plate may be used for the sole purpose of relocating the ignition trigger.
- 6.7.4 Aftermarket spark plugs with a different heat rating may be used.
- 6.8 IGNITION AND ELECTRONICS — FOUR-STROKE
- 6.8.1 Replacement batteries are allowed but must fit into the original equipment battery box and be securely fastened.
- 6.8.2 The original electronic control unit may be reprogrammed so long as it does not offer any additional inputs or outputs than the original unit, and it must connect with the original connections. No additional sensors may be added (e.g., exhaust gas temperature, detonation sensors, etc.). Engine temperature sensors may be disabled.
- 6.8.3 Aftermarket spark plugs with a different heat rating may be used.
- 6.9 TURBOCHARGER/SUPERCHARGER
- 6.9.1 Modifications to any part of the turbocharger or supercharger system (i.e., housing, turbines, rotors, sensors, ducting, etc.) are not allowed.
- 6.10 DRIVELINE
- 6.10.1 Impeller may be modified or aftermarket, providing that the original diameter is maintained. Replacement wear rings that are within OEM internal diameter specifications may be used. Silicone adhesive sealant may be used in addition to original equipment seal to seal pump inlet. Visibility spout must be removed or plugged.
- 6.10.2 No internal modifications of any kind, including grinding, surfacing, polishing, machining, shot peening, etc., will be allowed on any driveline components (e.g., pump stator, reduction nozzle, etc.).

25.1 COMPETITION CLASSES (IJSBA)

- 25.1.1 The following competition classes are typical of what may be offered at IJSBA-sanctioned events. Event promoters have the option to decide which classes are offered depending on local interest. Competitors should contact event promoters for information regarding the specific classes that will be offered.
- 25.1.2 Riders intending to compete at national tour or world championship events and/or qualifiers should be aware of the specific rules and classes applicable to those events. For information regarding national and world championship classes, go to [www.ijsba.com](http://www.ijsba.com).
- 25.1.3 For a watercraft to be eligible for competition in Regional and National events in the United States, the manufacturer must produce a minimum of 500 (200 for Ski Division) identically manufactured units of a model and make those units available for sale through the manufacturer's normal means of U.S. distribution (see Homologation).

Beginner Ski

Women Ski

Veterans Ski (Age 35 beginning January 1, 2015)

Masters Ski (Age 45 beginning January 1, 2015)

Ski Lites

Ski Stock

Ski Limited

Ski Open

Ski Modified /GP

Vintage Ski (JS type hulls only. 550cc maximum displacement. Modified Rules for all engine provisions. Superstock rules for all other allowances to the watercraft.

Sport Spec

Sport GP

Beginner Runabout

Women Runabout (Stock Class Rules for Runabouts equipped with a supercharger or turbocharger plus the allowance of an aftermarket seat; Limited Rules for Runabouts equipped with normally aspirated engines).

Veterans Runabout (Limited Class Rules for Runabouts equipped with a supercharger or turbocharger; Open Class Rules for Runabouts equipped with normally aspirated engines).

Masters Runabout

Runabout Rec Lites (Stock Class Rules. Normally aspirated four stroke Runabouts up to 950cc/1100cc and two stroke Runabouts up to 735cc).

Runabout Stock

Runabout Limited

Runabout Open

Runabout 1000 Superstock (Superstock Rules. 800cc maximum displacement for Two Stroke powered Runabout. 1000cc maximum displacement for Four Stroke powered Runabouts. Four Stroke powered runabouts may add a supercharger or turbocharger).

Runabout Modified /GP (Popular Additional Runabout Distinctions: 800cc, 1300cc, Normally Aspirated, Classic)

Freestyle

Contact IJSBA for additional class suggestions and to obtain a list of current alternative classes.

Classes should be further distributed by skill designation (i.e. Novice, Expert, Pro or combined skills such as Amateur and Pro-Am).

**THE IJSBA HIGHLY ADVISES AGAINST NOVICES OPERATING OPEN, MODIFIED, OR GP CLASS PWC!**

**Note:**

In all 800cc Ski Classes, all normally aspirated two-stroke watercraft may increase engine displacement to 850cc maximum displacement.

26.1 RELEASE AND WAIVER OF LIABILITY

26.1.1 The following is a condition of participation. Every participant will be required to sign the release and waiver form at each IJSBA-sanctioned event before participating.

RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK AND INDEMNITY AGREEMENT FOR IJSBA EVENTS

**I assume the risk of serious injury or death. Personal Watercraft racing is a high speed activity where numerous persons are navigating a very tight buoy course in a competitive and aggressive manner. Personal Watercraft do not have brakes, water spray frequently causes limited visibility, and changing water conditions make for an inconsistent atmosphere in all parts of the race course. Collisions are frequent as are mechanical failures, spin outs, loss of control, and mental errors. Endurance and Freeride/Freestyle activities carry equal dangers and risks as closed course. It is a strong possibility that I will be injured, or even killed, while participating in a Personal Watercraft competition and I still chose to participate in this event despite this possibility: \_\_\_\_\_ (Initials).**

IN CONSIDERATION of being permitted to compete, officiate, observe, work for, or participate in any way in the EVENT(S) or being permitted to enter for any purpose any RESTRICTED AREA (defined as any restricted area requiring special authorization, credentials or permission to enter or any area which admission by the general public is restricted or prohibited including but not limited to the competition area), EACH OF THE UNDERSIGNED, for himself, his personal representatives, heirs and next of kin:

1. Acknowledges, agrees and represents that he or she has or will immediately upon entering any of such RESTRICTED AREAS, and will continuously thereafter, inspect the RESTRICTED AREAS which he or she enters. He or she further agrees and warrants that if at any time he or she is in or about RESTRICTED AREAS and feels anything to be unsafe, he or she will immediately advise the officials of such and will leave the RESTRICTED AREAS and/or refuse to participate further in the EVENT(S).
2. Acknowledge that this event is not produced by the IJSBA. This event is produced by an independent promoter who is responsible for all safety aspects of the event. The skill levels, speeds, track size, experience/inexperience of participants may be drastically different from other sanctioned events and there may be a higher frequency of aggressiveness and competitiveness as well as a higher degree of inexperienced competitors who are more prone to errors. There is no warranty or guarantee that competitors actual skill matches the skill designated on their license and/or classification.
3. HEREBY RELEASE, WAIVES, DISCHARGES AND COVENANTS NOT TO SUE the International Jet Sports Boating Association, Inc. (IJSBA), the promoters, participants, racing associations, other sanctioning organizations, or any subdivisions thereof, track operators, course owners, officials, riders, pit crews, rescue personnel, any persons in any RESTRICTED AREA, promoters, sponsors, advertisers, owners or lessees of premises used to conduct the EVENT(S), premises and event inspectors, surveyors, underwriters, consultants and others who give recommendations, directions or instructions or engage in risk evaluation or loss control activities regarding the premises or EVENT(S) and each of them, their directors, officers, agents and employees, all for the purposes herein referred to as "Releasees," FROM ALL LIABILITY TO THE UNDERSIGNED, his personal representatives, assigns, heirs and next of kin FOR ANY AND ALL LOSS OR DAMAGE, AND ANY CLAIM OR DEMANDS THEREFORE ON ACCOUNT OF INJURY TO THE PERSON OR PROPERTY OR RESULTING IN DEATH OF THE UNDERSIGNED ARISING OUT OF OR RELATED TO THE EVENT(S), WHETHER CAUSED BY THE NEGLIGENCE OF THE RELEASEES OR OTHERWISE.
4. HEREBY AGREES TO INDEMNIFY AND SAVE AND HOLD HARMLESS the Releasees and each of them FROM ANY LOSS, LIABILITY, DAMAGE OR COST they may incur arising out of or related to the EVENT(S) WHETHER CAUSED BY THE NEGLIGENCE OF THE RELEASEES OR OTHERWISE.
5. HEREBY ASSUMES FULL RESPONSIBILITY FOR ANY RISK OF BODILY INJURY, DEATH OR PROPERTY DAMAGE arising out of or related to the EVENT(S) WHETHER CAUSED BY THE NEGLIGENCE OF THE RELEASEES OR OTHERWISE.
6. HEREBY ACKNOWLEDGES THAT THE ACTIVITIES OF THE EVENT(S) ARE VERY DANGEROUS and involve the risk of serious injury and/or death and/or property damage. Each of THE UNDERSIGNED also expressly acknowledges that INJURIES RECEIVED MAY BE COMPOUNDED OR INCREASED BY NEGLIGENT RESCUE OPERATIONS OR PROCEDURES OF THE RELEASEES.
7. HEREBY agrees that this Release and Waiver of Liability, Assumption of Risk and Indemnity Agreement extends to all acts of negligence by the Releasees, INCLUDING NEGLIGENT RESCUE OPERATIONS and is intended to be as broad and inclusive as is permitted by the laws of the Province or State in which the EVENT(S) is/are conducted and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full legal force and effect.
8. HEREBY UNDERSTANDS that the International Jet Sports Boating Association does not provide competitors or participants with any insurance policy against accidents, injury, or death.
9. THE UNDERSIGNED grants permission to the International Jet Sports Boating Association, Inc., sponsors, event sponsors, event promoters and their assigns, to use their voice and/or likeness, photographs and photographs of their personal watercraft in advertising and promotion material, feature use including radio, television, motion picture film, video tape, newspapers, magazines, programs and all other media in connection with advertising and purposes of trade, and agrees to display sponsor and IJSBA emblem on the chest of rider's vest or racing uniform, and the sponsor and IJSBA decal on both sides of the personal watercraft while competing in any IJSBA event.

THE UNDERSIGNED IS A MEMBER IN GOOD STANDING OF THE IJSBA AND/OR HAS APPLIED FOR MEMBERSHIP IN THE IJSBA, and agrees to abide by the IJSBA rules as set forth in the IJSBA Official Competition Rule Book, as these rules may be amended or interpreted from time to time.

I HAVE READ THIS RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK AND INDEMNITY AGREEMENT, FULLY UNDERSTAND ITS TERMS, UNDERSTAND THAT I HAVE GIVEN UP SUBSTANTIAL RIGHTS BY SIGNING IT FREELY AND VOLUNTARILY WITHOUT ANY INDUCEMENT, ASSURANCE, OR GUARANTEE BEING MADE TO ME AND INTEND MY

SIGNATURE TO BE A COMPLETE AND UNCONDITIONAL RELEASE OF ALL LIABILITY TO THE GREATEST EXTENT ALLOWED BY LAW.