

2019 AQUAX PRO & AM SPRINT **TECHNICAL RULES**



IF THE RULES SAY - YOU CAN DO THIS - YOU CAN. IF THE RULES DO NOT SAY YOU CAN DO IT, THEN ASSUME THAT YOU CANNOT UNTIL YOU CHECK WITH THE SERIES ORGANIZER.

AX69. CLASS RULES - SPRINT 4S, 2S, SPARK/EX

The Sprint categories are open to stand up and single seater watercraft designed for one person and must remain strictly stock as supplied by OEM except where rules allow.

Entrants are divided into classes according to rider ability, age, engine capacity or type of craft. The series organiser retains the right to allow special dispensation to downgrade or upgrade a rider if deemed appropriate. Riders that come under this rule will be named in a rules bulletin and will not be reassigned during the course of the season.

- (a) **Am Sprint** class is designed for 2-stroke stand-on type craft up to 100hp. To be eligible to compete in the Am Sprint championship equipment must remain stock as furnished by the manufacture, except where rules allow.

Craft eligible for Am Sprint class

Yamaha Superjet
Kawasaki SXR 800

Classes

Am Sprint
Junior Sprint

- (b) **Pro Sprint** class is designed for 4-stroke stand-on type craft up to 160hp. To be eligible to compete in the Pro Sprint championship equipment must remain stock as furnished by the manufacture, except where rules allow.

Craft eligible for Pro Sprint class

Kawasaki SXR 1500
Hydrospace Benelli

Classes

Pro Sprint

- (c) **Sprint SE** class is designed for 4-stroke single-seater type craft up to 120hp. To be eligible to compete in the Sprint SE championship equipment must remain stock as furnished by the manufacture, except where rules allow.

Craft eligible for Pro/AM Sprint SE class

Sea-Doo Spark
Yamaha EX
Yamaha EXR – *subject to testing*

Classes

Sprint SE
Sprint SE Women

AX70. CRAFT COMPLIANCE

- (a) Watercraft competing in the Sprint categories must conform to the specifications that follow. Craft that do not conform to these rules will be classified as Cup and will be governed by the AquaX Cup rules.
- (b) All watercraft must remain strictly stock as supplied by the OEM except where rules allow or require substitutions or modifications. Changes or modifications not listed here are not permitted. Some original equipment components may not comply with rules.
- (c) Hull and Engine Identification Numbers must be displayed as furnished by the manufacturer.
- (d) 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.
- (e) Original equipment parts may be updated or backdated to original equipment parts of the same make and model providing there is no performance gain. The part must be a bolt on part requiring no modifications to that part or any other parts except where rules allow substitutions or modifications.
- (f) Like for like parts that do not offer any performance enhancing characteristics may be used. If unsure contact the Series Organiser for verification.
- (g) Bonding agents may be used on threads and shafts.
- (h) Watercraft competing in in the Sprint classes craft must conform to the following criteria:
 - 1. AM SPRINT
 - The OEM published dry weight for model.
 - Hull length cannot exceed 231cm (91in.)
 - Hull width cannot exceed 73cm (29 in.).
 - 2. PRO SPRINT
 - The OEM published dry weight for model.
 - Hull length cannot exceed 267cm (105in.)
 - Hull width cannot exceed 79cm (31in.).
 - 3. SPRINT SE
 - The OEM published dry weight for model.
 - Hull length cannot exceed 314cm (124in.)
 - Hull width cannot exceed 113cm (44in.).
- (i) Unleaded Fuels only.
- (j) The decision of the AquaX Technical Director and/or AquaX Race Director regarding modifications will be final. Any question regarding the legality of modifications should be directed to the Series Organiser prior to the use in competition.

AX71. HULL - SPRINT CLASSES

- (a) All watercraft must have a flexible tow loop attached to the bow eye. 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.
- (b) Hull and deck repairs may be made. However, these repairs must not alter the standard configuration by more than 2.00mm (0.08 in.). Hull, bulkhead and deck may be internally reinforced.
- (c) Replacement bumpers may be used provided a hazard is not created.

- (d) Water-spray deflector - 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. When a spray deflector is used the tow loop must be extended in length allowing for easy hook up should the craft need towing.
- (e) 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.
- (f) Original bilge pump may be modified or disconnected. Aftermarket bilge draining systems that do not create a hazard are allowed.
- (g) Buckets, hatches and instrument cowlings may be modified or aftermarket (removed) provided seals are intact and no extra air intake or air-flow is provided and a hazard is not created.

AX72. HANDLING - SPRINT CLASSES

- (a) 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.
- (b) 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.) 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.
- (c) All watercraft may be equipped with a maximum of two sponsons. Stock sponsons may be modified or aftermarket. Sponson shall not exceed 91.45cm (36.00in.). 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.
- (d) Steering system may be after market. Handlebar, throttle, throttle and steering cable, and grips may be modified or aftermarket. Handlebar cover may be modified or removed. Aftermarket switches and switch housings may be used. The handlebar must be padded at the mounting bracket or, if it has a crossbar, the crossbar must be padded.
- (e) Spark/EX only - Seat must remain stock, covers maybe aftermarket. The OEM seat height cannot be changed by more than +/- 25.4mm (1 in). Original shape and design must not change. No extra air intake allowed.

AX73. AIR AND FUEL DELIVERY - SPRINT CLASSES

- (a) Aftermarket air filters that meet current Marine standards may be used.
- (b) Ski 2S only - Carburetor jets (replaceable type), needle valves and needle valve springs may be changed. Additional fuel filters maybe use, petcock maybe by passed. Fuel filler caps may be modified or after-market provide a hazard is not created.
- (c) Choke may be removed provided additional air intake for the engine is not created. Aftermarket primer system may be installed.

AX74. DRIVELINE - SPRINT CLASSES

- (a) Impeller may be aftermarket.
- (b) Visibility spout must be removed or plugged.

AX75. ENGINE - SPRINT CLASSES

(a) AM SPRINT

1. Cylinders maybe bored to allow pistons up to 850cc. Aftermarket pistons assemblies may be used provided they are like for like replacement part and must weigh within $\pm 25\%$ of the original equipment part. Engine displacement must not exceed 850cc. Chamfering of cylinder ports are limited to 1m and a maximum angle of 30°.
2. Cylinders maybe interchanged between homologated watercraft of the same manufacturer. Engines with a displacement of less than 780cc shall be allowed a minimum head gasket thickness of .75mm (0.03in) with a tolerance of -10% . Base gasket thickness of .5mm (0.02in) with a tolerance of $\pm 10\%$. If the OEM cylinder does not provide for a displacement within 10% of 850cc then aftermarket sleeves maybe utilized, provided that the sleeve maintain the same port sizes and specification of the original OEM sleeve.
3. The exhaust stinger maybe modified.
4. Cooling systems maybe modified or aftermarket. Additional cooling lines and bypasses maybe added and relocated. Additional cooling lines and fittings maybe added to the pump. Fittings may not be added to the cylinder head, cylinder or crankcase.

(b) PRO SPRINT & PRO/AM SPRINT SE

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. 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.
2. Replacement hoses and fuel lines may not provide any other function than original equipment hoses. Changes in temperature tolerances are allowed.
3. Hydrospace S4 only - Cooling systems maybe modified or aftermarket. Additional cooling lines and bypasses maybe added and relocated. Additional cooling lines and fittings maybe added to the pump. Fittings may not be added to the cylinder head, cylinder or crankcase.

AX76. IGNITION AND ELECTRONICS - SPRINT CLASSES

- (a) The original electronic control unit may be modified or aftermarket maybe used provided it does not offer any additional inputs or outputs than the original unit, and it must connect with the original connections. Engine temperature sensors maybe disabled.
- (b) The original electronic control unit may be reprogramed 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.

NB: Hydrospace riders please contact series administrator.

- (c) Aftermarket spark plugs are allowed.
- (d) Aftermarket batteries are allowed

AX77. ELECTRONIC TRANSMITTAL DEVICES

- (a) Electronic transmittal of information, including radio communication to or from a moving watercraft, is prohibited with the following exceptions:
1. AquaX timing and GPS transponders utilized for scoring and technical scrutineering purposes (mandatory equipment assigned by P1 AquaX).
 2. Data or video transmitted for the sole use of P1 approved event television production.
 3. Data logging is permitted; however, the information may not be downloaded in real time from a moving watercraft. Information downloaded from the watercraft may be reviewed by the Race and Technical Directors at any time.
 4. Direct radio comms between rider and pit team during the race is allowed. All communication maybe be recorded and used in P1 approved event television production.