

## SPORT GP

### SKI MODELS ALLOWED:

- **YAMAHA WAVEBLASTER (WB1, WB2, WB3)**
- **KAWASAKI X2 (GEN1, GEN2)**
- **SEADOO HX**
- **BULLETT**
- **WAMILITONS**
- **POLARIS HURRICANE**
- **HURRICAN-R**

Due to the speeds and precision handling needed for GP class racing, it is highly recommended that all competitors must have an Expert or Pro license prior to participating.

The maximum displacement for a Ski equipped with Two Stroke engines is 1300cc. The maximum displacement of naturally aspirated Four Stroke engines is 1600cc. The maximum displacement for Four Stroke turbocharged or supercharged engines is 1100cc.

Forced Induction Four Stroke Engines with a displacement of 900cc or less must have a device to release all boost pressure above 14psi.

Forced Induction Four Stroke Engines with a displacement above 900cc must have an IJSBA approved device to release all boost pressure above 10psi.

All watercraft must have a flexible tow loop attached to the bow. The tow loop should be made of a flexible material (nylon strap, rope, etc.) so as not to create a hazard. Tow hooks, which protrude beyond the plane of the hull, must be removed.

The top deck may be modified or aftermarket All watercraft in the GP classes, regardless of displacement, may utilize an aftermarket hood.

If the watercraft is equipped with footwells, the footwells must be blocked off, during competition, allowing no indentation into the footwell sides.

The hull may be modified or aftermarket but cannot exceed the length or width of the upper deck component of the bond flange as measured by a plumb bob (bumpers removed). Fins, rudders, skegs and other appendages that may create a hazard will not be allowed.

All watercraft may be equipped with a maximum of two sponsons. Original equipment sponsons may be modified, aftermarket, repositioned or removed. 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.

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 below the flat plane of the pump intake area. All leading edges must be radiused so as not to create a hazard.

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. The sides of the extension must be connected to the radiused portion of the pump plate so as not to create a hazard.

Aftermarket trim tabs, either fixed, automatic and/or rider controlled, may be used. Original equipment trim plates that are detachable from the hull may be removed or replaced when installing aftermarket trim tabs. All hull extensions mounted on the hull's transom will be considered as a trim tab. All edges must be radiused so as not to create a hazard.

Replacement bumpers may be used provided a hazard is not created.

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.

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. Aftermarket steering cables are allowed.

Steering systems may be modified or aftermarket.

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.

Engine compartment foam may be removed, modified or aftermarket.

Engines may be bored. Aftermarket piston assemblies are allowed. Engine displacement must not exceed class designation. The number, type, and placement of rings on piston may be changed.

OEM crankcases may be interchanged between homologated watercraft of any OEM manufacturer. Internal modifications to the fuel, oil and/or water exposed surfaces are allowed. Bearing and seal surfaces may not be modified. Filler material may be added to hollow pockets in the base gasket areas. Ignition/stator mounting area modifications are limited to spot facing,

drilling and tapping threads for the purpose of mounting an aftermarket or modified ignition system.

Additional carburetor pulse line fittings may be installed. Crankcase drain system may be removed or plugged. Additional mounting holes, not to exceed 10.00mm diameter, are allowed provided they do not penetrate the internal surface of the cases.

Base gasket and intake surfaces may be machined. Repairs to cracked or punctured crankcases may be made provided only one damaged area affecting one cylinder bank has been repaired. External modifications to the crankcase finish (plating, polishing and/or painting) are allowed for cosmetic purposes only. No other external modifications or external repairs will be allowed.

Cylinder and cylinder head may be modified or aftermarket.

Crankshaft assembly may be modified or aftermarket. Stroke and rod length may be changed.

Engine bed and motor mounts may be modified or aftermarket. Engine may be repositioned in the hull.

Engine gaskets may be modified or aftermarket.

Exhaust system (i.e., manifold, head pipe, expansion chamber, waterbox, muffler(s), etc.) may be modified or aftermarket. Through-hull exhaust may be modified or aftermarket, providing a hazard is not created. Exit location of the exhaust gases may be relocated to the transom below the bond flange. No tuned portion of the exhaust system shall protrude outside the hull.

Cooling system may be modified or aftermarket. Aftermarket cooling lines and water bypass systems may be used. Bypass fittings may be modified, aftermarket and/or relocated but must be directed downward and/or rearward so as not to create a hazard for other riders. Any valves used within the entire cooling system must be of the fixed type or automatic (e.g., thermostats, pressure regulators, solenoids, etc.). 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.

Replacement starter motor and bendix may be used. Oil-injection system may be disconnected or removed.

Replacement of general maintenance parts (spark plugs, spark plug wires, spark plug caps, wiring, water hoses, fuel lines, clamps and fasteners) shall not be restricted to original equipment. Stripped threads can be repaired.

Carburetor(s) may be modified or aftermarket provided they do not vent or spill fuel at any attitude with or without the engine running. The number of venturis cannot exceed the number of cylinders. No slide-type carburetors. Aftermarket primer may be used. Intake manifold

assembly may be modified or aftermarket. Aftermarket crankcase pressure operated fuel pumps may be used. Fuel fillers may be relocated internally.

Modified or aftermarket vapor/air separators must not exceed 2 in. x 6 in., and must have a return line to the fuel tank open at all times. Additional fuel reservoirs may not be used. Aftermarket or modified electric fuel pumps, not exceeding 4 psi, may be used. When the engine is shut off or stops, the fuel pump must automatically stop. No manually operated on/off-type fuel pumps are allowed.

Aftermarket fuel-injection systems are allowed provided the following regulations are adhered to: High-pressure fuel hose meeting SAE J30R9 must be used; A.N. threaded-type fittings or equivalent and non-removable, crimped-type clamps must be used on the high-pressure portion of the system (hose clamps, tie wraps, are not allowed), only metal-type fuel filters may be used on the high pressure portion of the system; all other in-line filters must be installed on the low-pressure portion of the system. When the engine is shut off or stops, the fuel pump must automatically stop. No manually operated on/off-type fuel pumps are allowed.

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. The fuel tank shall not be restricted to the original equipment, as supplied by the manufacturer, so long as the replacement is an unmodified tank from another homologated PWC and the tank fits securely in the watercraft without causing a hazard. Original equipment fuel filler and relief valve must be used and cannot be modified. The fuel pickup, fuel filter and fuel petcock may be removed and/or aftermarket parts may be used. Additional fuel filters may be used and fuel cell foam may be added to the original equipment fuel tank. Fuel tank filler cap may be modified or aftermarket provided a hazard is not created. Aftermarket fuel tanks not coming from another homologated PWC may be allowed by the race director so long as it is demonstrated that the aftermarket fuel tanks meet or exceed the strengths and safety standards of an OEM fuel tank.

Intake silencer may be removed.

Reed valve assemblies may be modified or aftermarket. Rotary valve may be modified or aftermarket.

Ignition system, electrical box, flywheel and flywheel cover may be modified or aftermarket. Battery charging circuit may be disabled and/or removed.

An additional battery and battery box may be used. Batteries must fit into a proper battery box and be securely fastened. Batteries may be relocated.

Engine temperature sensor assembly may be disconnected and/or removed.

Engine blocks may be interchanged between homologated watercraft of any OEM manufacturer except in the case of the 1500cc based Kawasaki SX-R which must use the engine block furnished by the manufacturer. Original OEM engine blocks must be used. Internal modifications

to the oil and/or water exposed surfaces will be allowed. The head gasket surface of the cylinder block may be machined.

The original cylinder head casting must be used. Intake and exhaust runners may be modified. Material may be added to the runners. Intake and exhaust ports may be modified. Port diameters and shapes may be changed. Combustion chambers may be modified. Material may be added to the combustion chamber. The original number of intake and exhaust valves must be the same as original.

Repairs to the cylinder head affecting one cylinder bank are allowed. The head gasket surface may be machined.

Aftermarket valve train components are allowed, providing the original method of activation is maintained (if originally activated by a camshaft, they may not be converted to solenoid activation). Valves may be shimmed with OEM or aftermarket shims. Valve springs may be modified or aftermarket.

Camshaft(s) may be aftermarket. The number of camshafts must be the same as original. Original bearing type and dimensions must be used. Cam timing may be changed. Cam gears, tensioners, chain or belt may be modified or aftermarket.

Engines may be bored. Aftermarket piston assemblies are allowed. Engine displacement must not exceed class designation

Crankshaft may be modified or aftermarket. Total weight of the crankshaft must be within +/5.00% of original equipment. Replacement bearings or bearing shells are allowed, providing they maintain their original type and dimensions.

Engine balancing assemblies may be modified, aftermarket, or removed.

Aftermarket connecting rods made of ferrous materials are allowed. Rod length may be changed.

Exhaust system (manifold, connecting pipes, hoses, muffler) may be modified or aftermarket. Through-hull exhaust may be modified or aftermarket, providing a hazard is not created. No tuned portion of the exhaust system may protrude outside of the hull. Exit location of the exhaust gases may be relocated to the transom below the bond flange.

Cooling system may be modified or aftermarket. Additional cooling lines may be added. Aftermarket water bypass systems may be used. Cooling system bypass fittings may be modified or aftermarket and/or relocated but must be directed downward and/or rearward so as not to create a hazard for other riders. Any valves used within the entire cooling system must be of the fixed type or

automatic (thermostats, pressure regulators, solenoids). Manually controlled devices (by means of actuation) that alter the flow of cooling water during operation are not allowed. Original

cooling system thermostat may be removed, modified or aftermarket. Cooling system flush kits are allowed.

Baffles in oil reservoir may be modified. The addition of baffles in oil reservoir is allowed. Oil pump may be modified or aftermarket.

Valve cover may be replaced for cosmetic purposes and/or weight reduction only.

Replacement starter motor and bendix may be used.

Replacement engine mounts may be used.

External modifications to the engine finish (plating, polishing and/or painting) are allowed for cosmetic purposes only.

Replacement of general maintenance parts (e.g., gaskets, seals, spark plug wires, spark plug caps, wiring, water hoses, fuel lines, fuel filters, oil filters, clamps and fasteners) shall not be restricted to original equipment. Stripped threads may be repaired. Fasteners may integrate locking mechanisms.

#### FOUR-STROKE 1100 CC AND LESS

Engine blocks may be interchanged between homologated watercraft of any OEM manufacturer so long as the displacement of the donor engine was 1100 or less as furnished by the manufacturer. Original OEM engine blocks must be used. Internal modifications to the oil and/or water exposed surfaces will be allowed. The head gasket surface of the cylinder block may be machined.

The original cylinder head casting must be used. Intake and exhaust runners may be modified. Material may be added to the runners. Intake and exhaust ports may be modified. Port diameters and shapes may be changed. Combustion chambers may be modified. Material may be added to the combustion chamber. The original number of intake and exhaust valves must be the same as original.

Repairs to the cylinder head affecting one cylinder bank are allowed. The head gasket surface may be machined.

Aftermarket valve train components are allowed, providing the original method of activation is maintained (e.g., if originally activated by a camshaft, they may not be converted to solenoid activation). Valves may be shimmed with OEM or aftermarket shims. Valve springs may be modified or aftermarket.

Camshaft(s) may be aftermarket. The number of camshafts must be the same as original. Original bearing type and dimensions must be used. Cam timing may be changed. Cam gears, tensioners, chain or belt may be modified or aftermarket.

Engines may be bored. Aftermarket piston assemblies are allowed. Engine displacement must not exceed class designation

Crankshaft may be modified or aftermarket. Total weight of the crankshaft must be within +/5.00% of original equipment. Replacement bearings or bearing shells are allowed, providing they maintain their original type and dimensions.

Engine balancing assemblies may be modified, aftermarket, or removed.

Aftermarket connecting rods made of ferrous materials are allowed. Rod length may be changed.

Exhaust system (manifold, connecting pipes, hoses, muffler) may be modified or aftermarket. Through-hull exhaust may be modified or aftermarket, providing a hazard is not created. No tuned portion of the exhaust system may protrude outside of the hull. Exit location of the exhaust gases may be relocated to the transom below the bond flange

Cooling system may be modified or aftermarket. Additional cooling lines may be added. Aftermarket water bypass systems may be used. Cooling system bypass fittings may be modified or aftermarket and/or relocated but must be directed downward and/or rearward so as not to create a hazard for other riders. Any valves used within the entire cooling system must be of the fixed type or automatic (thermostats, pressure regulators, solenoids). Manually controlled devices (by means of actuation) that alter the flow of cooling water during operation are not allowed. Original cooling system thermostat may be removed, modified or aftermarket. Cooling system flush kits are allowed.

Baffles in oil reservoir may be modified. The addition of baffles in oil reservoir is allowed. Oil pump may be modified or aftermarket.

Valve cover may be replaced for cosmetic purposes and/or weight reduction only.

Replacement starter motor and bendix may be used.

Replacement engine mounts may be used.

External modifications to the engine finish (plating, polishing and/or painting) are allowed for cosmetic purposes only.

Replacement of general maintenance parts (e.g., gaskets, seals, spark plug wires, spark plug caps, wiring, water hoses, fuel lines, fuel filters, oil filters, clamps and fasteners) shall not be restricted to original equipment. Stripped threads may be repaired. Fasteners may integrate locking mechanisms.

The original fuel injectors may be modified to increase fuel-flow rate. Aftermarket fuel injectors that increase fuel flow are allowed provided they must not increase airflow into the combustion chamber. Fuel rail and fuel regulator may be modified or aftermarket. Additional fuel injectors

may be added. Aftermarket fuel pumps are allowed provided that when the engine is shut off or stops, the fuel pump must automatically stop. No manually operated on/off fuel pumps are allowed. High-pressure fuel hose meeting SAE J30R9 must be used; only metal type fuel filters may be used on the high-pressure portion of the system; all other in-line filters must be installed on the low-pressure portion of the system.

Throttle body may be modified or aftermarket. The number of butterflies may be increased but may not exceed the number of cylinders. Intake manifold assembly may be modified or aftermarket.

Carburetor(s) may be modified or aftermarket provided they do not vent or spill fuel at any attitude with or without the engine running. Carburetors may be used in addition to or in place of the fuel-injection system. The number of venturis cannot exceed the number of cylinders. No slide-type carburetors. Aftermarket primer may be used. Intake manifold assembly may be modified or aftermarket. Aftermarket air-pulse-pressure operated fuel pumps may be used.

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. The fuel tank shall not be restricted to the original equipment, as supplied by the manufacturer, so long as the replacement is an unmodified tank from another homologated PWC and the tank fits securely in the watercraft without causing a hazard. Original equipment fuel filler and relief valve must be used and cannot be modified. The fuel pickup, fuel filter and fuel petcock may be removed and/or aftermarket parts may be used. Additional fuel filters may be used and fuel cell foam may be added to the original equipment fuel tank. Fuel tank filler cap may be modified or aftermarket provided a hazard is not created. Aftermarket fuel tanks not coming from another homologated PWC may be allowed by the race director so long as it is demonstrated that the aftermarket fuel tanks meet or exceed the strengths and safety standards of an OEM fuel tank.

#### TURBOCHARGER/SUPERCHARGER

In the Ski Modified Class, a turbocharger or Supercharger may only be affixed as long as under 1100cc.

Turbocharger housing must be of the full circulating, water-jacket type at all times when the engine is running. Aftermarket turbochargers and superchargers may be used provided a hazard is not created. Original turbocharger or supercharger may be modified. Aftermarket turbochargers and superchargers may be added to originally normally aspirated watercraft. All hoses and pipes may be modified or aftermarket. Where the Race Director, or Technical Inspector, cannot determine if a turbocharger is sufficiently water-jacketed then a heat wrap and/or additional cooling mechanisms may be added to ensure safety.

Intercooler may be modified or aftermarket.

A boost pressure-relief valve must be set to release all pressure above 14 PSI for engines with displacements 900cc or less and 10PSI for engines with displacements above 900cc.



Boost sensors may be modified or aftermarket.

#### DRIVELINE

Impeller, impeller housing, stator vane assembly, pump mounting plate and/or pump shoe may be modified or aftermarket. Pump nozzle and directional nozzle may be modified or aftermarket.

Overall length of the complete pump and nozzle assembly may be no more than 50.00mm longer than original equipment. Aftermarket nozzle trim systems may be used. Additional cooling fittings may be installed. Visibility spout must be removed or plugged. Silicone adhesive sealant may be used in addition to original equipment seal to seal pump inlet.

Couplers, bearing housing and driveshaft may be modified or aftermarket provided they maintain a 1:1 drive ratio between the engine and the pump.