



## SHOWROOM STOCK CLASS

This class is intended to promote interest in very close to stock personal watercraft competition and to enable individuals to become active competitors with relatively modest investment and maintenance costs. Watercraft competing in these classes must conform to the specifications which follow.

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. 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.

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.

1.3 Sound level shall not exceed 86 dB(a) at 22.86m (75 ft.). See Section 19.5 of the IJSBA Competition Rulebook.

1.4 Engine fuel must consist of gasoline meeting the criteria defined in Section 19.4.3 of the IJSBA Competition Rulebook.

## 2 HULL

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.

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.). Handles, drop-in type storage buckets, bolt-on type mirrors and gauges may not be modified or removed.

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.

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.

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 177.80mm (7.00 in.) beyond the end 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. Fins, rudders, skegs and other appendages that may create a hazard will not be allowed.

2.6 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.

2.7 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. Handlebar holder may be modified or aftermarket. The handlebar must be padded at the mounting bracket or, if it has a crossbar, the crossbar must be padded.

Steering stem & steering stem holder must not be modified.

No quick-turn steering modifications to alter steering ratio are allowed.

Aftermarket steering cables will be allowed.

2.8 Original equipment seat base must be used. Seat cover may be changed.

2.9 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.

2.10 Original bilge pump may be modified or disconnected. Aftermarket bilge draining systems that do not create a hazard are allowed.

### 3 ENGINE – FOUR-STROKE

3.1 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.

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

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

3.4 Intake and exhaust valves may be shimmed with OEM or aftermarket shims.



3.5 Cooling system must remain stock as supplied by the manufacturer. No modifications of any type are allowed to the cooling system. Cooling system flush kits are allowed, provided they do not alter the flow of water in any way during normal operation.

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

3.7 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 AIR/FUEL DELIVERY – FOUR-STROKE

4.1 Original equipment flame arresters that meet USCG, UL-1111 or SAE J-1928 Marine standards must be used. No modifications to the original air filter/flame arrestor system are permitted. Modifications to the airflow downstream of the airflow sensor are not allowed. No modifications to the turbocharger and supercharger system, if applicable, are allowed.

4.2 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. Additional fuel filters may be used. Fuel tank filler cap may be modified or aftermarket provided a hazard is not created.

4.3 Fuel injectors and fuel pump must remain stock. Fuel pressure regulator may not be modified to change fuel pressure.

#### 5 IGNITION AND ELECTRONICS – FOUR-STROKE

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

5.2 The original electronic control unit must be used. No changes to its function in any way are permitted. No additional sensors may be added (e.g., exhaust gas temperature, detonation sensors, etc.). Engine temperature sensors may be disabled.

5.3 Ignition timing may not be altered unless a manufacturer fitted tuning feature (ignition pick up slotted, selectable correction factor, etc.).



5.4 Aftermarket spark plugs with a different heat rating may be used.

## 6 TURBOCHARGER/SUPERCHARGER

6.1 Modifications to any part of the turbocharger or supercharger system (i.e., housing, turbines, rotors, sensors, ducting, etc.) are not allowed.

## 7 DRIVELINE

7.1 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.

7.2 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.).