

## SKI LITES CLASSES

SKI MODELS ALLOWED:

- **KAWASAKI SXR800**
- **YAMAHA SUPERJET**
- **KAWASAKI 750SX/SXI**

Ski Lites is based off of an OEM watercraft with a maximum of 85 Horsepower. 2-stroke twin cylinder engines up to 850cc are allowed in SKI LITES CLASSES.

All watercraft must remain strictly stock, except where rules allow or require substitutions or modifications. Changes or modifications not listed here are not permitted. We may allow additional modifications to Stock Classified PWC which provide for replacement/reinforcements to parts and components (i.e. brackets, fittings, etc.) that have known failure risks in race conditions. Such changes will only be allowed if the changes allow for no volume or performance gains. Hull Identification Numbers must be displayed as furnished by the manufacturer..

OEM parts may be updated or backdated to newer original equipment parts, as long as same model. The part must be a direct bolt-on requiring no modifications to that part or any other parts except where rules allow substitutions or modifications.

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). Tow hooks which protrude beyond the plane of the hull must be removed.

Hull and deck repairs may be made for repair or structure support. These repairs must not alter the original configuration.

All watercraft may be equipped with a maximum of two sponsons (front and rear). OEM sponsons may be modified, aftermarket, repositioned or removed. Aftermarket or modified sponsons must not exceed the bond flange in thickness. All leading edges must be rounded so it does not create a hazard. Fiberglassing sponsons into the hull is allowed, but adding a second set of bolt-on sponsons on top of the fiberglassed sponsons is not allowed. Double stacking sponsons is not allowed. Rudders, skegs and other appendages that may create a hazard will not be allowed. Sponsons attached to the inside of the bond flange shall not protrude outside the bond flange (bumper removed) when measured in a level horizontal plane.

Intake grate may be modified or aftermarket. Intake grate is required, with at least one bar running parallel to the drive shaft. Grates may not extend more than 11.00mm below the flat plane of the pump intake area. All edges must be rounded so as not to create a hazard.

Rideplate 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 100mm 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.

Replacement bumpers may be used provided a hazard is not created. Must be a replacement OEM bumper rail, or a stick on bumper rail. Rubber and/or plastic only.

Handlebars, throttle lever, cables, and grips may be modified or aftermarket. Handlebar chin pad cover may be modified or aftermarket. 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 are also allowed.

Handlepole may be modified or aftermarket provided it functions as originally designed. Handlepole attaching points may be reinforced.

Mat kits (hydroturf/jettrim) may be added for extra support and grip. Hull custom painting and graphics kits are allowed. The surface finish of any metal component outside the hull area above the bond flange may be polished, shot peened or painted.

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

Engine vent tubes may be modified, aftermarket, or removed. Inlet and outlet openings may not be enlarged. Vents may be shielded or plugged. No other modifications to the hood, or aftermarket hoods will be allowed.

### SKL.3 ENGINE — TWO-STROKE

SKL.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. Replacement piston assemblies must weigh within  $\pm 25.00\%$  of original equipment. Chamfering of cylinder ports must not exceed 1.00mm at a 30 degree maximum angle.

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. 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.

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.

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

No internal engine or pump modifications of any kind, including grinding, surfacing, polishing, machining, or porting will be allowed on any engine components.

Exhaust system must remain stock, exactly as supplied by the manufacturer. An insert may be added to reduce the inside diameter of the stinger portion of the exhaust system. Exhaust internals must not be altered in any way shape or form. Cooling lines may be added to the insert only. A cooling line may be added to the stinger portion of the exhaust system where an insert is not utilized. (no b-pipes, wet-pipes, dry-pipes... oem only)

Engine 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 filters may be modified or aftermarket. 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 diameter is maintained. Fittings may not be added to the cylinder head, cylinder, or crankcase. Any valves used within the entire cooling system must be of the fixed type or automatic. Electronically controlled valves or water injections systems are not allowed unless originally equipped. Manually controlled devices 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.

Replacement engine mounts may be used.

Oil-injection system may be disconnected or removed.

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) can be aftermarket or modified as long as:

1. Replacement gaskets may be used but must be of the same type (e.g., sheet, o-ring, etc.) as their OEM. 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.

2. Base gasket cannot be thicker than 0.8mm (0.032in).
  
3. Head gaskets must be no thinner than .005mm than the OEM thickness. Head gaskets must be no thicker than 1.55mm than the OEM thickness as supplied by the manufacturer.

Engines that have a displacement of less 780cc shall be allowed a minimum head gasket thickness of .75mm with a tolerance of 10% and a base gasket thickness of .5mm with a tolerance of +/- 10%. Stripped threads must be repaired to the original size.

Cylinders may be interchanged between homologated watercraft of the same manufacturer.

Aftermarket flame arrestors may be used. Carburetor jets, 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 systems may be installed. No other carburetor modifications will be allowed. Aftermarket carburetors are not allowed in any way shape or form. (Includes upgrading from OEM yamaha mikuni 38s to aftermarket mikuni 38s).

The entire fuel system is a closed system. The watercraft must not vent or spill fuel when the engine is 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.

Reed petals may be modified or aftermarket. Reed cage assemblies must remain OEM.

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

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 (exhaust temperature, sensors). Engine temperature sensors may be disabled.

Ignition timing may be altered by installing a timing advance kit. An adapter plate may be used for the sole purpose of relocating the ignition trigger.

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

Impeller may be modified or aftermarket, providing that the original diameter is maintained. Replacement wear rings that are within OEM internal 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.

No internal modifications of any kind, including grinding, surfacing, polishing, machining, shot peening, etc., will be allowed on any driveline components (pump stator, reduction nozzle)