

MCUI (UC) TECHNICAL REGULATIONS FOR SUPERMONO

1. Displacement capacities

Maximum capacities:

Supermono 500 up to 750cc Single cylinder 4 Stroke

- (a) Engines must be normally aspirated.
- (b) No tolerance on capacities is permitted.
- (c) Engine capacity must be measured at ambient temperature.

2. Minimum Weights

Minimum weight at post race inspection is 95kg

Ballast may be added to achieve the minimum weights, but it must be securely fixed to the frame and must be declared to the Chief Scrutineer/Technical Steward at the preliminary check.

In the final inspection at the end of the race, the machines chosen will be weighed in the condition they finished the race. Nothing can be added to the machine including water, oil, fuel or tyres.

A 1kg tolerance in the weight of the machine at the post race control is accepted.

3. Number Plates:

Size as per MCUI Standing Regulations

The background colours and figures for Supermono are black background with yellow numbers.

With the RAL colour table values being black 9005 and yellow being 1003.

In case of a dispute concerning the legibility of numbers, the decision of the Chief Scrutineer will be final.

4. Fuel

All Supermono engines must function on normal unleaded or super unleaded fuel only, the use of fuel additives is strictly forbidden.

5. Main Frame/Chassis

The use of titanium and/or magnesium in the construction of the frame is not permitted.

6. Front Forks

The use of titanium in the construction of the front forks is not permitted.

The surface treatment is free. There must be at least 15 degrees of movement of the steering each side of the centre line. Stops must be fitted to ensure a clearance of at least 30 mm between the handlebar and the tank when at the extremes of lock.

The steering damper cannot act as a steering lock limiting device.

7. Swingarm

The use of titanium, magnesium and composites in the construction of the swing arm is not permitted.

8. Rear Shock

No restrictions.

9. Wheels

Maximum front wheel rim width is 4.0 in.

Maximum rear wheel rim width is 6.25 in.

Minimum wheel diameter is 16 in.

The use of titanium or any other light alloy in the construction of the wheel spindles is not permitted.

Carbon wheels are strictly forbidden

10. Brakes

Supermono's must have a minimum of one brake on each wheel that is independently operated. The use of carbon fibre or carbon composite discs is not permitted.

11. Tyres

All dry tyres must be EU or DOT road legal treaded tyres. Wet race tyres are permitted. Slick tyres are strictly forbidden. Tyre warmers are allowed.

12. Foot Rest/Foot Controls

Footrests may be of a folding type but in this case must be fitted with a device which automatically returns them to the normal position, and an integral protection must be provided at the end of the footrest. Non folding metallic footrests must have an end (plug) which is permanently fixed, made of plastic, Teflon or equivalent type of material (min. radius of 8 mm).

13. Handlebars and Hand Controls

Handlebars must have a width of not less than 450 mm and their ends must be solid or rubber covered. The width of the handlebar is defined as the width measured between the outside of the handlebar grips or throttle twistgrips.

The use of titanium in the construction of handlebars is not permitted. Throttle controls must be self closing when not held by the hand.

Lever must not be longer than 200 mm. measured from the pivot point.

Engine stop switch must be located on the handlebars.

Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.

14. Fairing/Body Work

The front wheel with the exception of the tyre and the part hidden behind the mudguard must be clearly visible from each side.

Bodywork must not extend beyond a line drawn vertically at the leading edge of the front tyre. The suspension should be fully extended when the measurement is taken. Mudguards shall not be considered as streamlining.

Mudguards are not compulsory. When fitted, front mudguards must not extend in front of a line drawn upwards and forwards at 45 degrees from a horizontal line through the front wheel spindle or below a line drawn horizontally and to the rear of the front wheel spindle.

The windscreen edge and the edges of all other exposed parts of the streamlining must be rounded.

The front inclination where the number plate is fixed must not exceed an angle of 30 degrees to the rear of the vertical

Whatever the position of the handlebars, there must be a space of at least 20 mm between the streamlining and the ends of the handlebars or other steering system, including any attachments thereto.

The maximum width of bodywork must not exceed 600 mm.

No part of the streamlining (fairing) must be to the rear of a vertical line drawn through the rear wheel axle.

The rim of the rear wheel must be clearly visible over 180 degrees of its circumference to the rear of this line. There must be a clearance of at least 15 mm around the circumference of the tyre at all positions of the motorcycle suspension and all positions of the rear wheel adjustment.

No part of the motorcycle shall project to the rear of a vertical line drawn through the exterior edge of the rear tyre.

The motorcycle, unloaded, must be capable of being leaned at an angle of 50 degrees from the vertical without touching the ground, other than the tyres.

Air foils or spoilers may only be fitted on solo machines when they are an integral part of the fairing or seat. They must not exceed the width of the fairing nor the height of the handlebar. Sharp edges must be rounded off with a minimum radius of 8 mm. Moving aerodynamic devices are not permitted.

The rider in the normal driving position must be completely visible, with the exception of his forearms, from either side, from the rear and from above. In race position, the minimum space between the face of the rider, or his helmet and the streamlining (including the windscreen) must be 100 mm. It is forbidden to use transparent materials to evade these rules.

The fuel cap must be fitted in such a way that it does not protrude in relation to the tank profile and cannot be torn off in a crash.

The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (min. 5 litres).

The lower fairing should incorporate a maximum of two holes of 25 mm. These holes must remain closed in dry conditions and can only be open in wet race conditions as declared by the Clerk of the Course.

All sharp edges must be rounded.

15. Fuel Tank

Fuel tank must be completely filled with a fire retardant material (i.e. "Explosafe").

Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250 cc made of a suitable material.

Fuel caps, when closed, must be leak proof. Additionally, they must be secured to prevent accidental opening at any time.

The fuel cap must be fitted in such a way that it does not protrude in relation to the tank profile and cannot be torn off in a crash.

16. Seat

The width of the seat or anything to its rear shall not be more than 450 mm, exhaust systems excepted.

The maximum height of the back of the riders seat is 150 mm.

This will be measured from the lowest point of the rigid base of seat to the uppermost part of the fairing behind the rider.

All exposed edges must be rounded.

17. Radiator and Oil Coolers

Oil cooler must not be mounted on or above the rear mudguard.

18. Air Box

The air box is compulsory and must be completely closed around the induction bell mouth and all engine breather tubes, with air ingress only above the lowest point of the bell mouths lip. Carburation instruments may be entirely within the airbox.

The air box drains must be sealed.

All Supermono motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

The breather system (airbox plus any breather oil collector box) must be capable in the event of drain pipe blockage, of retaining a minimum of 1000 cc of discharged fluid.

19. Carburation instruments

No restrictions

20. Oil Lines

Oil lines containing positive pressure must be of metal reinforced construction with swaged or treaded connectors.

21. Transmission/Gearbox

The maximum number of gears is limited to six speeds.

22. Exhaust System

Maximum noise limit is **105** db in accordance with MCUI Regulations.

The correct stroke must be marked on a clearly visible position of the crankcase.

The outlet of the exhaust must not extend behind a line drawn vertically through the edge of the rear tyre. The last 30 mm of the pipe must be horizontal and parallel to the centre line of the motorcycle with a tolerance of +/- 10 degrees.

23. ENGINE PROTECTION.

All lateral covers/engine cases containing oil on, 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

24. The following items MUST BE incorporated

All motorcycles must have a functioning red light at the rear of the seat, to be used during wet practices and races or in low visibility conditions, as declared by the race direction.

The rear safety light must comply with the following:

- a) The lightning direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear , at least 15 degrees to both left and right sides of the centre of the motorcycle.
- b) It must be safely mounted on the very end of the seat /rear bodywork and approximately on the centre line of the motorcycle. In case of dispute over the mounting position or visibility of the rear safety light the decision of the chief technical steward will be final.
- c) The power output /luminosity must be equivalent to approximately 10-15 watt (incandescent) or 3-5 watt (led)
- d) The light must be able to be switched on and off.

Motorcycles must be equipped with a functional ignition kill switch or button mounted on either side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine.

Throttle controls must be self closing when not held by the hand.

Electric fuel pumps must be wired through a circuit cut out which will operate automatically in the event of an accident.

A test procedure for the circuit cut out must be incorporated in the design of electrically operated fuel pumps for use upon inspection.

All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired.

All Supermono motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

The breather system (airbox plus any breather oil collector box) must be capable in the event of drain pipe blockage, of retaining a minimum of 1000 cc of discharged fluid.

Where an oil breather pipe is fitted, the outlet must discharge into a catch tank located in an easily accessible position and which must be emptied before the start of a race.

Oil cooler must not be mounted on or above the rear mudguard.

The minimum size of a catch tank shall be 250 cc for gear box breather pipes and 500 cc for engine breather pipes.